EPSON
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User's Guide

Multimedia Projector

EB-485Wi
EB-485W
EB-480i
EB-480
EB-475Wi
EB-475W
EB-470

Notations Used in This Guide

- **Safety indications**

The documentation and the projector use graphical symbols to show how to use the projector safely.
The indications and their meaning are as follows. Make sure you understand them properly before reading the guide.

Warning	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
Caution	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

- **General information indications**

Attention	Indicates procedures which may result in damage or injury if sufficient care is not taken.
	Indicates additional information and points which may be useful to know regarding a topic.
☛	Indicates a page where detailed information regarding a topic can be found.
▸▸	Indicates that an explanation of the underlined word or words in front of this symbol appears in the glossary of terms. See the "Glossary" section of the "Appendices". ☛ "Glossary" p.159
[Name]	Indicates the name of the buttons on the remote control or the control panel. Example: [Esc] button
Menu Name	Indicates Configuration menu items. Example: Select **Brightness** from **Image**. **Image** - **Brightness**

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Introduction

This chapter explains the projector's features and the part names.

Projection Functions

Enabling projection from a short distance

You can project large images from a short distance without having to move the projector away from the screen. By mounting the projector on a ceiling or wall, you can minimize shadows cast on the screen even when you are standing near it and avoid being dazzled by the projected light.

☛ "Screen Size and Projection Distance" p.147

Drawing function (EB-485Wi/EB-480i/EB-475Wi only)

You can write characters and draw figures on the projected screen using the electronic pen (Easy Interactive Pen). You can also draw on a computer screen from the projected screen by using the Easy Interactive Tools software supplied.

☛ "Easy Interactive Function (EB-485Wi/EB-480i/EB-475Wi only)" p.57

Easy writing on a whiteboard or blackboard using the pattern function

You can project ruled lines and grid patterns. This is useful when drawing diagrams on a whiteboard or blackboard.

☛ **Settings** - **Pattern** p.101

Connecting with a USB cable and projecting (USB Display)

By simply connecting the supplied or a commercially available USB cable, you can project images from a computer's screen without a computer cable.

☛ "Projecting with USB Display" p.41

Connecting to a network and projecting images from the computer's screen

You can connect the projector to a computer on a network and project the computer's screen using the supplied EasyMP Network Projection (application software).

☛ *EasyMP Network Projection Operation Guide*

Enhanced security functions

- **Password Protect to restrict and manage users**
  By setting a password you can restrict who can use the projector.
  ☛ "Managing Users (Password Protect)" p.80
- **Control Panel Lock restricts button operation on the control panel**
  You can use this to prevent people changing projector settings without permission at events, in schools, and so on.
  ☛ "Restricting Operation (Control Panel Lock)" p.82
- **Equipped with various anti-theft devices**
  The projector is equipped with the following types of anti-theft security devices.
  - Security slot
  - Security cable installation point

  ☛ "Anti-Theft Lock" p.83

Optional Functions

Enlarge and project your files with the Document Camera

You can project paper documents and objects using the optional Document Camera. Image focus is automatically adjusted using the auto focus function. You can also enlarge images using digital zoom.

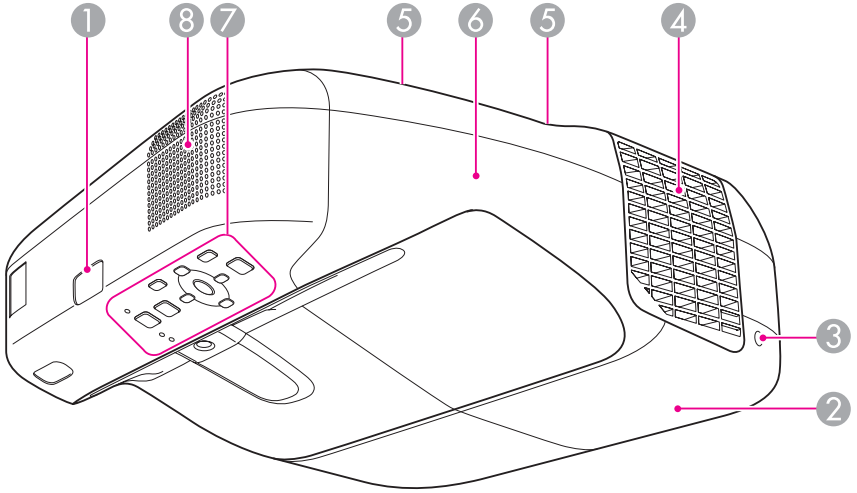
☛ "Optional Accessories" p.146

Easy connection to a computer with Quick Wireless

By simply connecting the optional Quick Wireless Connection USB Key to a computer, you can project the computer's screen. (Windows computers only)

☛ "Optional Accessories" p.146

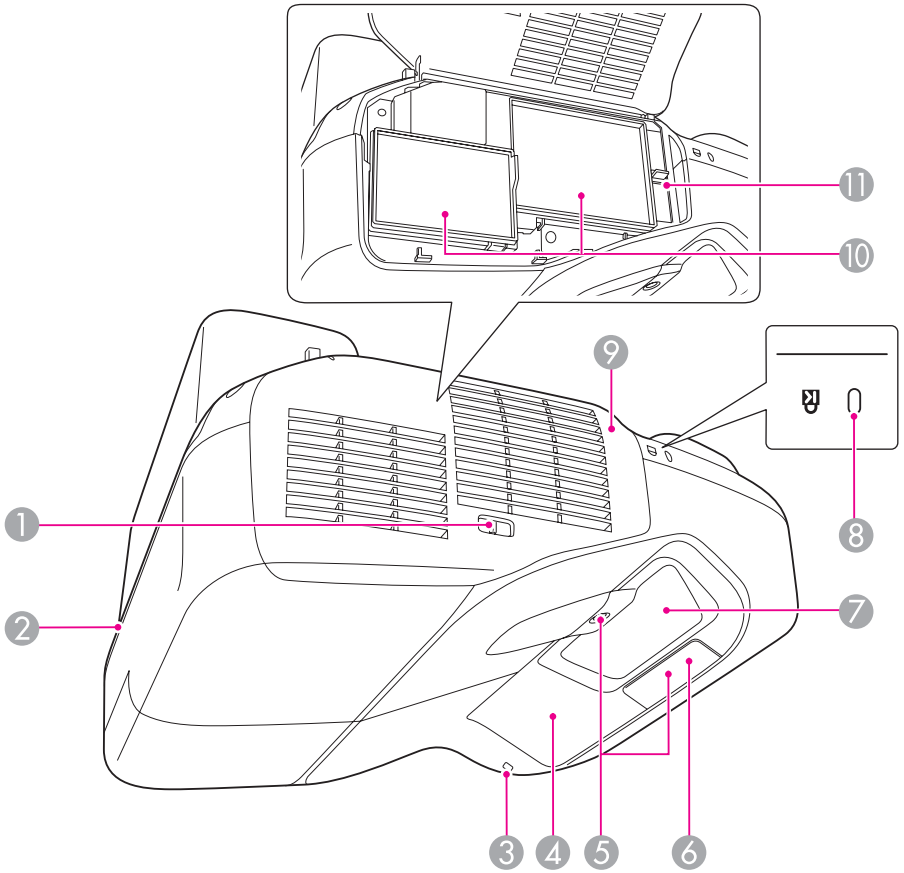
Front/Top



	Name	Function
1	**Remote receiver**	Receives signals from the remote control.
2	**Lamp cover**	Open when replacing the projector's lamp. ☛ "Replacing the Lamp" p.139
3	**Lamp cover fixing screw**	Screw to fix the lamp cover in place. ☛ "Replacing the Lamp" p.139
4	**Air exhaust vent**	Exhaust vent for air used to cool the projector internally. **⚠ Caution** While projecting, do not put your face or hands near the air exhaust vent, and do not place objects that may become warped or damaged by heat near the vent.
5	**Cable cover fixing screws**	Screws to fix the cable cover in place.

	Name	Function
6	**Cable cover**	Open by loosening both of the screws when connecting to an input port or installing the wireless LAN unit.
7	**Control panel**	Operates the projector. ☛ "Control Panel" p.15
8	**Speaker**	Outputs audio.

Side

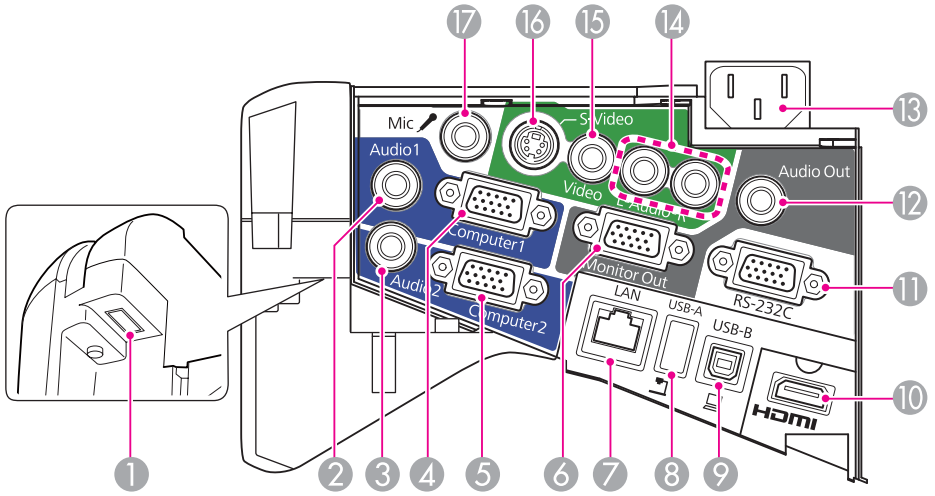


	Name	Function
1	**Air filter cover open/close lever**	Opens and closes the air filter cover.
2	**Security cable installation point**	Pass a commercially available wire lock through here and lock it in place. ☛ "Installing the wire lock" p.83

	Name	Function
3	**Wireless LAN indicator**	Indicates the access status to the optional wireless LAN unit.
4	**Easy Interactive Function receiver** (EB-485Wi/EB-480i/ EB-475Wi only)	Receives signals from the Easy Interactive Pen. ☛ "Easy Interactive Function (EB-485Wi/EB-480i/ EB-475Wi only)" p.57
5	**Obstacle sensor**	Detects obstacles that are interfering with the projection area. ☛ "Cleaning the Obstacle Sensor" p.137
6	**Remote receiver**	Receives signals from the remote control.
7	**Projection window**	Projects images. **⚠ Warning** • Do not look into the projection window while projecting. • Do not place any objects or put your hand near the projection window. This area is dangerous as it reaches high temperatures due to the concentrated projection light.
8	**Security slot**	The security slot is compatible with the Microsaver Security System manufactured by Kensington. ☛ "Anti-Theft Lock" p.83
9	**Air filter cover**	Open when changing the air filter or operating the focus lever.
10	**Air intake vent (air filter)**	Takes in air to cool the projector internally. ☛ "Cleaning the Air Filter" p.138 ☛ "Replacing the Air Filter" p.142
11	**Focus lever**	Adjusts the image focus. Open the air filter cover to operate.

Interface

The following ports are available under the cable cover.

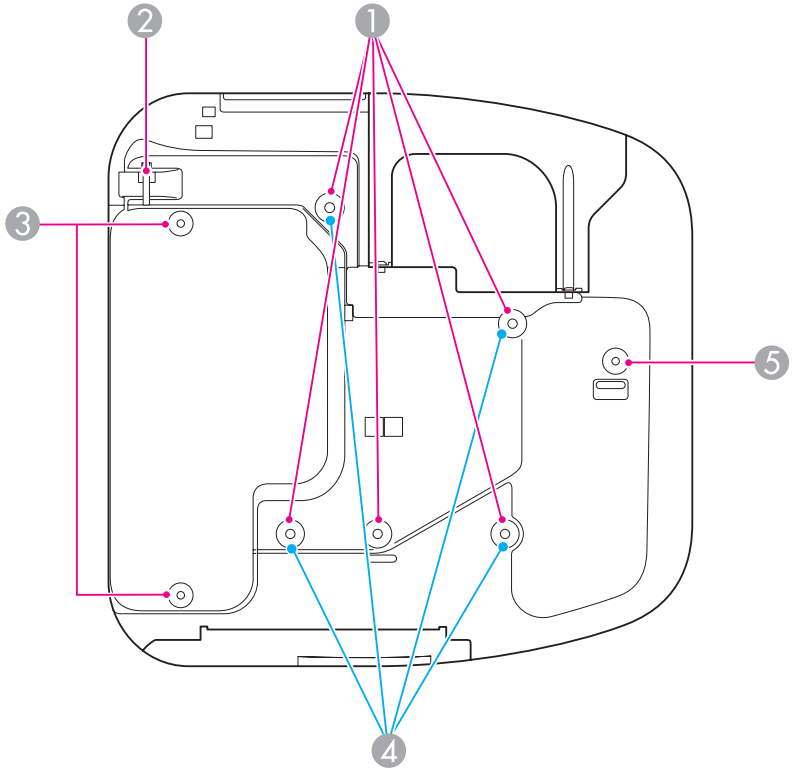


	Name	Function
1	**Wireless LAN unit installation section**	Install the optional Wireless LAN unit here. ☛ "Installing the Optional Wireless LAN Unit" p.37
2	**Audio1 port**	Inputs audio from equipment connected to the Computer1 port.
3	**Audio2 port**	• Inputs audio from equipment connected to the Computer2 port. • Inputs audio from other devices when projecting images from the device connected to the USB-A port.
4	**Computer1 port**	Inputs image signals from a computer and component video signals from other video sources.
5	**Computer2 port**	Inputs image signals from a computer and component video signals from other video sources.
6	**Monitor Out port**	Outputs analog RGB signals input from the Computer1 port to an external monitor. You cannot output signals input from other ports or component video signals.

	Name	Function
7	**LAN port**	Connects a LAN cable to connect to a network.
8	**USB-A port**	• Connects a USB memory device or a digital camera, and projects images as a Slideshow. ☛ "Projecting Without a Computer (Slideshow)" p.74 • Connects the optional Document Camera.
9	**USB-B port**	• Connects the projector to a computer via the supplied or a commercially available USB cable, and projects the images on the computer. ☛ "Projecting with USB Display" p.41 • Connects the projector to a computer via the supplied or a commercially available USB cable to use the Wireless Mouse function. ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70 • Connects the projector to a computer via the supplied or a commercially available USB cable to use the Easy Interactive Pen as a mouse or as a pen to draw on the projected screen. (EB-485Wi/EB-480i/EB-475Wi only) ☛ "Operating as a mouse and drawing by connecting to a computer (Computer Interactive)" p.57
10	**HDMI port**	Inputs video signals from HDMI compatible video equipment and computers. This projector is compatible with HDCP. ☛ "Connecting Equipment" p.26
11	**RS-232C port**	When controlling the projector from a computer, connect it to the computer with an RS-232C cable. This port is for control use and should not normally be used. ☛ "ESC/VP21 Commands" p.88
12	**Audio Out port**	Outputs audio from the currently projected image or the Mic port to an external speaker.
13	**Power inlet**	Connects the power cord to the projector. ☛ "From Installation to Projection" p.39

Name		Function
⑭	**Audio-L/R port**	Inputs audio from equipment connected to the S-Video port or the Video port.
⑮	**Video port**	Inputs composite video signals from video sources.
⑯	**S-Video port**	For S-video signals from video sources.
⑰	**Mic port**	Inputs audio from the microphone. ☛ "Connecting a microphone" p.33

Base

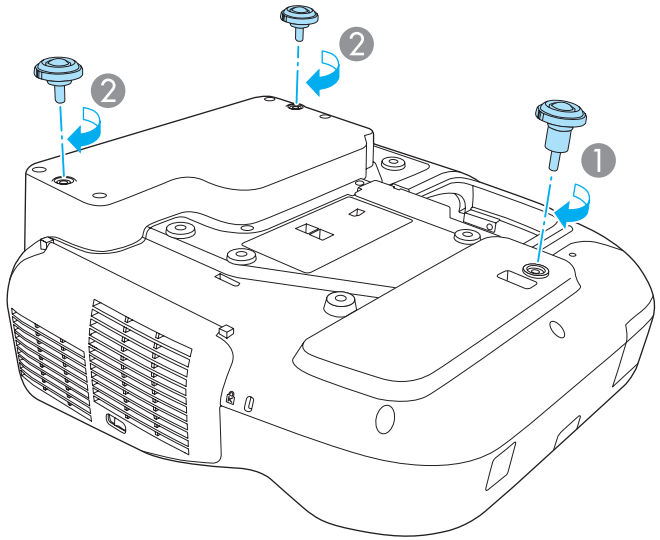


Name		Function
①	**Ceiling mount fixing points (five points)**	Attach the optional Ceiling Mount here when suspending the projector from a ceiling. ☛ "Installing the Projector" p.24 ☛ "Optional Accessories" p.146
②	**Security cable installation point**	Pass a commercially available wire lock through here and lock it in place. ☛ "Installing the wire lock" p.83

	Name	Function
③	**Rear foot fixing points (two points)**	Attach the feet when using the projector on a surface such as a desk. (Only models with feet supplied) ☛ "Attaching the feet (Only models with feet supplied)" p.14
④	**Wall mount fixing points (four points)**	Attach the setting plate when mounting on a wall. (Only models with setting plate supplied) ☛ *Installation Guide* ☛ "Optional Accessories" p.146
⑤	**Front foot fixing point**	Attach the foot with a spacer when using the projector on a surface such as a desk. (Only models with feet supplied) ☛ "Attaching the feet (Only models with feet supplied)" p.14

Attaching the feet (Only models with feet supplied)

Insert the feet into the foot fixing points.

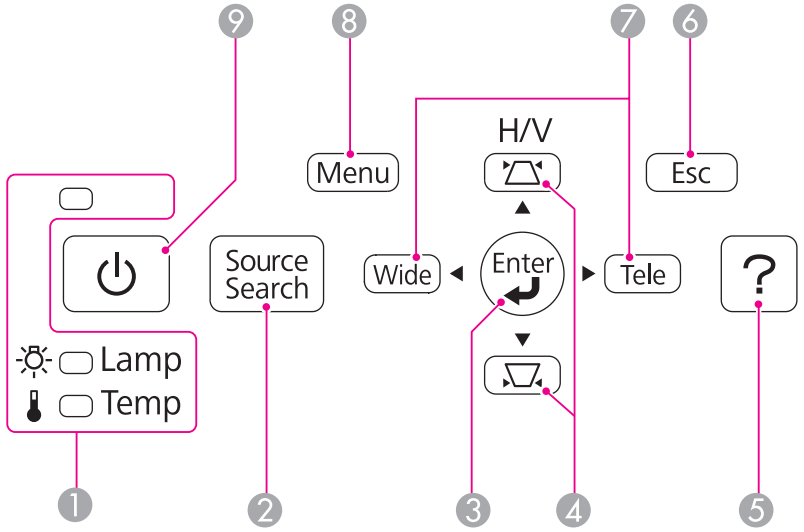


❶ Insert the foot with the spacer into the front foot fixing point.

❷ Insert the rear feet (x2) into the foot fixing points.

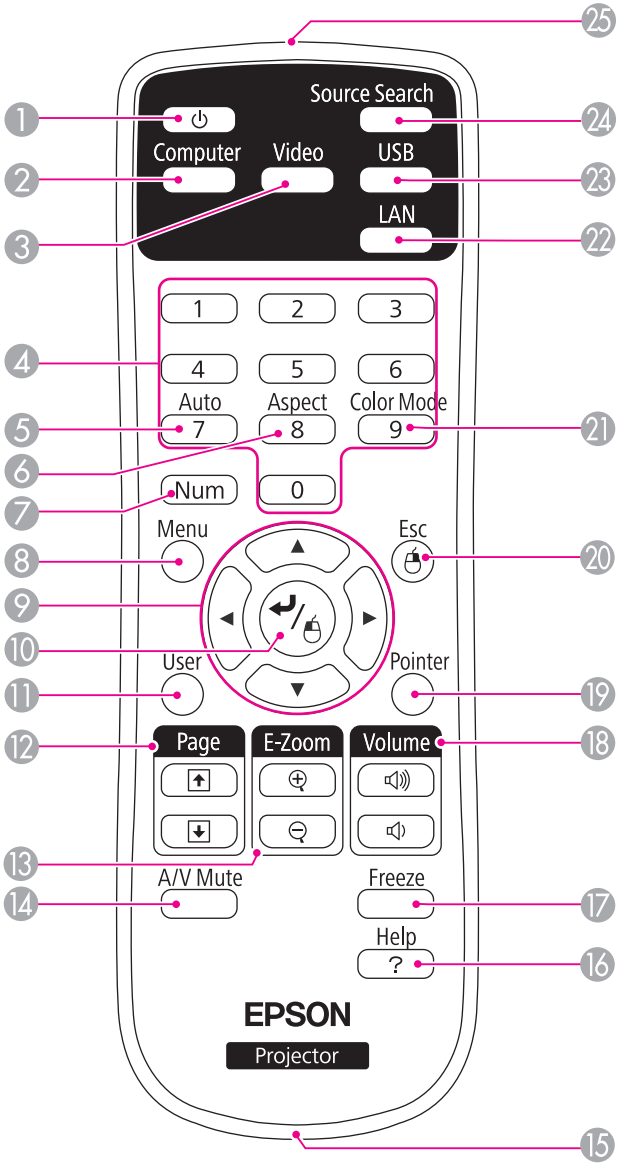
You can install this projector vertically on a desk.
☛ "Installation Methods" p.24

Control Panel



	Name	Function
1	**Status indicators**	Indicates the projector's status using color, and by being lit or flashing. ☛ "Reading the Indicators" p.118
2	**[Source Search] button**	Switches to the image from the input port where video signals are being input. ☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40
3	**[Enter] button** [↵]	• When the Configuration menu or the Help screen is displayed, it accepts and enters the current selection and moves to the next level. • If pressed while projecting analog RGB signals from Computer1 port or Computer2 port, you can automatically optimize Tracking, Sync., and Position.
4	**[▽][△] button**	• Displays the Keystone screen. ☛ "H/V-Keystone" p.45 • If pressed when the Configuration menu or the Help screen is displayed, these buttons select menu items and setting values. ☛ "Using the Configuration Menu" p.95 ☛ "Using the Help" p.117
5	**[Help] button**	Displays and closes the help screen which shows you how to deal with problems if they occur. ☛ "Using the Help" p.117
6	**[Esc] button**	• Stops the current function. • If pressed when the Configuration menu is displayed, it moves to the previous menu level. ☛ "Using the Configuration Menu" p.95
7	**[Tele]/[Wide] buttons**	• Adjusts the size of the projection screen. Press the [Tele] button to reduce the size of the projection screen and press the [Wide] button to increase the size of the projection screen. • Corrects keystone distortion in the horizontal direction when the Keystone screen is displayed. ☛ "H/V-Keystone" p.45 • If pressed when the Configuration menu or the Help screen is displayed, these buttons select menu items and setting values. ☛ "Using the Configuration Menu" p.95 ☛ "Using the Help" p.117
8	**[Menu] button**	Displays and closes the Configuration menu. ☛ "Using the Configuration Menu" p.95
9	**[⏻] button**	Turns the projector power on or off. ☛ "From Installation to Projection" p.39

Remote Control



	Name	Function
1	**[⏻] button**	Turns the projector power on or off. ☛ "From Installation to Projection" p.39
2	**[Computer] button**	Each time you press the button, the input changes between images from the Computer1 port and the Computer2 port.
3	**[Video] button**	Each time the button is pressed, the image cycles through the S-Video, Video, and HDMI ports.
4	**Numeric buttons**	• Enter the Password. ☛ "Setting Password Protect" p.80 • Use this button to enter numbers in **Network** settings from the Configuration menu.
5	**[Auto] button**	If pressed while projecting analog RGB signals from Computer1 port or Computer2 port, you can automatically optimize Tracking, Sync., and Position.
6	**[Aspect] button**	Each time the button is pressed, the aspect mode changes. ☛ "Changing the Aspect Ratio of the Projected Image" p.52
7	**[Num] button**	Hold down this button and press the numeric buttons to enter passwords and numbers. ☛ "Setting Password Protect" p.80
8	**[Menu] button**	Displays and closes the Configuration menu. ☛ "Using the Configuration Menu" p.95

	Name	Function
⑨	[▲][▼][◀][▶] button	• When the Configuration menu or Help screen is displayed, pressing these buttons selects menu items and setting values. ☛ "Using the Configuration Menu" p.95 • When projecting a Slideshow, pressing these buttons displays the previous/next image, rotates the image, and so on. ☛ "Projecting Without a Computer (Slideshow)" p.74 • During Wireless Mouse function, the mouse pointer moves in the direction of the button that was pushed. ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70
⑩	[↵] button	• When the Configuration menu or the Help screen is displayed, it accepts and enters the current selection and moves to the next level. ☛ "Using the Configuration Menu" p.95 • Acts as a mouse's left button when using the Wireless Mouse function. ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70
⑪	[User] button	Select any frequently used item from the seven or eight available Configuration menu items, and assign it to this button. By pressing the [User] button, the assigned menu item selection/adjustment screen is displayed, allowing you to make one-touch settings/adjustments. ☛ "Settings Menu" p.101 The following item is assigned by default. • EB-485Wi/EB-480i/EB-475Wi: **Auto Calibration** • EB-485W/EB-480/EB-475W/EB-470: **Power Consumption**

	Name	Function
⑫	[Page] buttons [⇞][⇟]	Changes pages in files such as PowerPoint files when using the following projection methods. • When using the Wireless Mouse function ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70 • When using USB Display ☛ "Projecting with USB Display" p.41 • When connecting to a network When projecting images using Slideshow, pressing these buttons displays the previous/next image file.
⑬	[A/V Mute] button	• Turns the video and audio on or off. ☛ "Hiding the Image and Sound Temporarily (A/V Mute)" p.67 • You can change the Projection mode as follows by pressing the button for about five seconds. **Front↔Front/Upside Down** **Rear↔Rear/Upside Down**
⑭	[E-Zoom] buttons [⊕][⊖]	Enlarges or reduces the image without changing the projection size. ☛ "Enlarging Part of the Image (E-Zoom)" p.69
⑮	Strap attachment hole	Allows you to attach a commercially available strap to the remote control.
⑯	[Help] button	Displays and closes the help screen which shows you how to deal with problems if they occur. ☛ "Using the Help" p.117
⑰	[Freeze] button	Pauses or resumes image playback. ☛ "Freezing the Image (Freeze)" p.67
⑱	[Volume] buttons [🔉][🔊]	[🔉] Decreases the volume. [🔊] Increases the volume. ☛ "Adjusting the Volume" p.50
⑲	[Pointer] button	Displays the on-screen pointer. ☛ "Pointer Function (Pointer)" p.68

	Name	Function
⑳	**[Esc] button**	• Stops the current function. • If pressed when the Configuration menu is displayed, it moves to the previous level. ☛ "Using the Configuration Menu" p.95 • Acts as a mouse's right button when using the Wireless Mouse function. ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70
㉑	**[Color Mode] button**	Each time the button is pressed, the color mode changes. ☛ "Selecting the Projection Quality (Selecting Color Mode)" p.51
㉒	**[LAN] button**	Changes to the images projected with EasyMP Network Projection. When projecting using the optional Quick Wireless Connection USB Key, this button switches to that image.
㉓	**[USB] button**	Each time the button is pressed, it cycles through the following images: • USB Display • Images from the device connected to the USB-A port
㉔	**[Source Search] button**	Switches to the image from the input port where video signals are being input. ☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40
㉕	**Remote control light-emitting area**	Outputs remote control signals.

Replacing the remote control batteries

If the remote control becomes unresponsive or inoperable after it has been used for some time, the batteries may have reached the end of their service life. When this happens, replace them with new batteries. Obtain two AA size manganese or alkaline batteries. You cannot use other batteries except for the AA size manganese or alkaline.

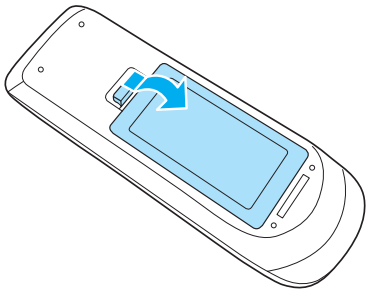
Attention

Make sure you read the following manual before handling the batteries.

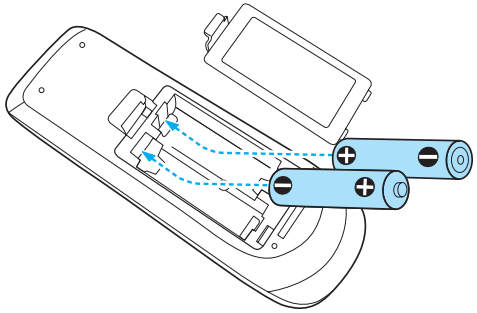
☛ *Safety Instructions*

1 Remove the battery cover.

While pushing the battery cover catch, lift the cover up.



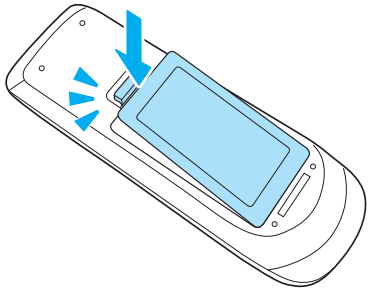
2 Replace the old batteries with new batteries.



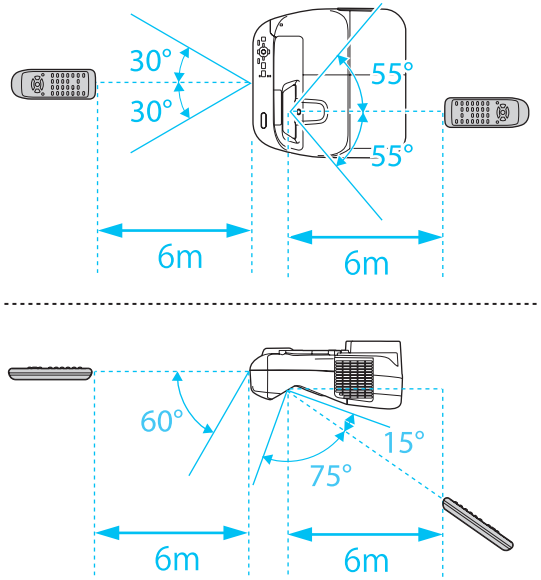
> **Caution**
>
> Check the positions of the (+) and (-) marks inside the battery holder to ensure the batteries are inserted the correct way.

3 Reattach the battery cover.

Press the battery cover until it clicks into place.



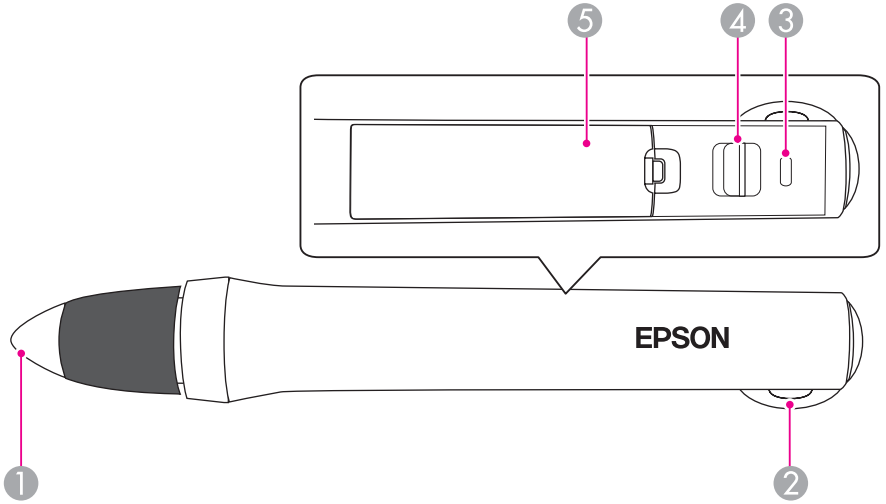
Remote control operating range



Easy Interactive Pen (EB-485Wi/EB-480i/EB-475Wi Only)

There are two types of Easy Interactive Pens with different colored bottom sections. You cannot use Easy Interactive Pens with the same colored bottom sections at the same time.

☛ "Optional Accessories" p.146



	Name	Function
1	Pen tip button	• Touch the screen to select an item such as an icon. • Touch the screen and move to draw on the projected screen. • Move over the screen without touching to move the pointer. ☛ "Easy Interactive Function (EB-485Wi/EB-480i/EB-475Wi only)" p.57 ☛ "Optional Accessories" p.146
2	Strap attachment hole	Allows you to attach a commercially available strap.
3	Battery indicator	Indicates the remaining battery power when the power is turned on. • Turns green for several seconds when the battery is charged. • Flashes green for several seconds when the battery is low. • Does not light when the battery is exhausted. Change the battery. ☛ "Replacing the battery for the Easy Interactive Pen" p.20
4	Slide switch	Switches the Easy Interactive Pen on and off. When turned on, it takes a few seconds before the Easy Interactive Pen is operational.
5	Battery cover	Open this cover when replacing the battery. ☛ "Replacing the battery for the Easy Interactive Pen" p.20

Replacing the battery for the Easy Interactive Pen

The battery indicator on the Easy Interactive Pen lights or flashes when the power is turned on. Does not light or flash when the battery is exhausted. When the indicator no longer lights or flashes, replace the battery. Use one of the following types of battery. Other chargeable batteries cannot be used.

- AA size manganese battery
- AA size alkaline manganese battery
- SANYO eneloop®*(HR-3UTG/HR-3UTGA)

*eneloop® is a registered trademark of Sanyo Electronic Co., Ltd.

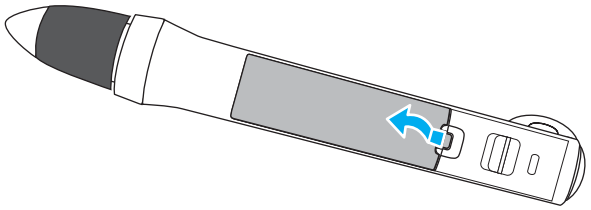
Attention

Make sure you read the following manual before handling batteries.

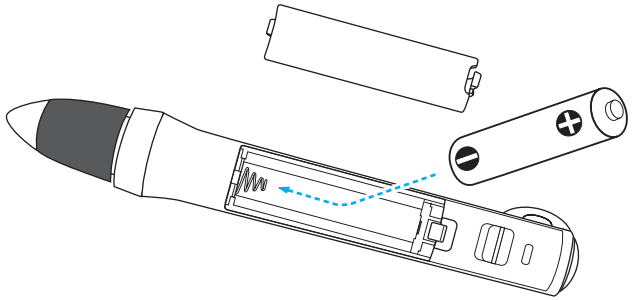
☛ *Safety Instructions*

1 Remove the battery cover.

While pushing the battery cover catch, lift the cover up.



2 Replace the old battery with a new battery.

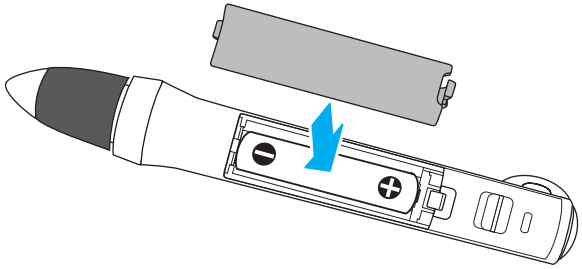


Caution

Check the positions of the (+) and (-) marks inside the battery holder to ensure the battery is inserted the correct way.

3 Replace the battery cover.

Press the battery cover until it clicks into place.

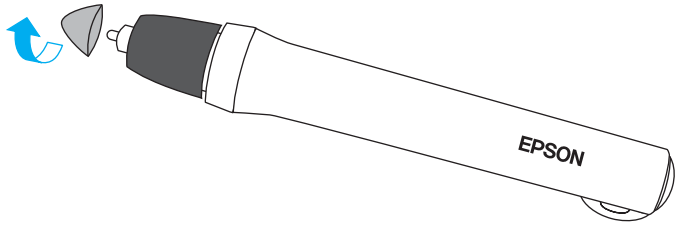


Replacing the tip of the Easy Interactive Pen

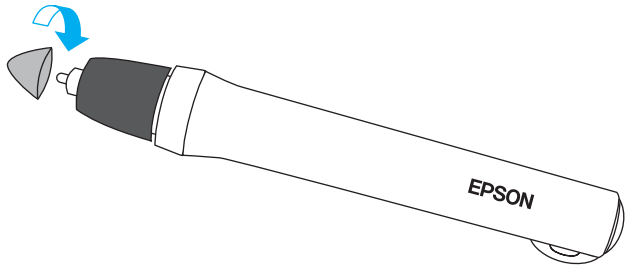
Replace the tip of the Easy Interactive Pen when it is worn.

☛ "Optional Accessories" p.146

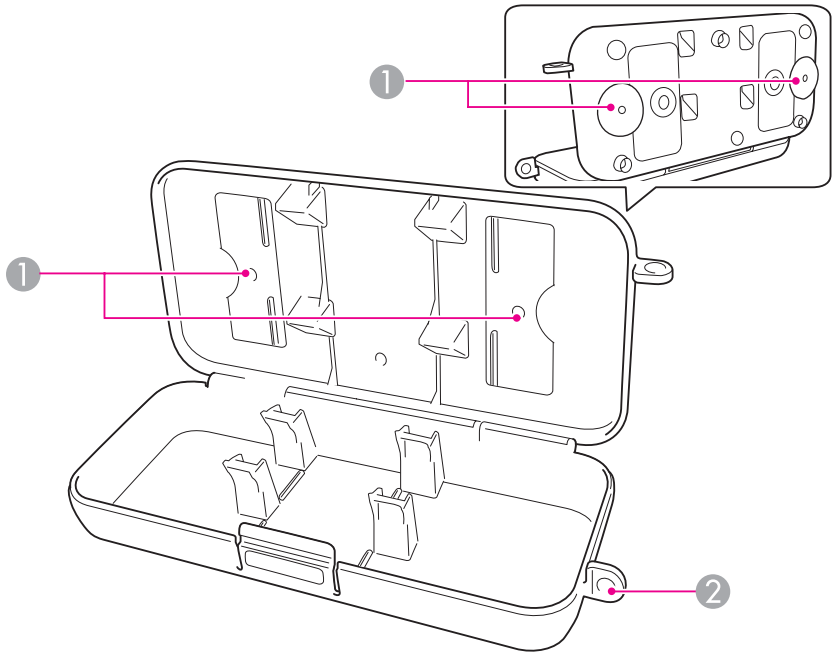
1 Turn the tip of the pen to remove it.



2 Turn the new tip to attach it.



Pen Tray (EB-485Wi/EB-480i/EB-475Wi Only)



Name		Function
1	**Fixing points**	Attach the pen tray to a whiteboard or wall.
2	**Security hole**	Pass a commercially available lock through here.

It is recommended that the pen tray be tightened with two commercially available M5 bolts.

Preparing the Projector

This chapter explains how to install the projector and connect projection sources.

Installation Methods

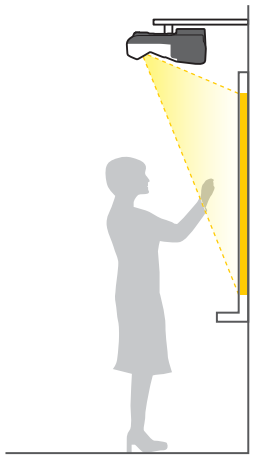
The projector supports the following six different projection methods. Install the projector according to the installation location.

Turn the projector off when you are changing the installation method. Turn the projector back on after changing the installation method.

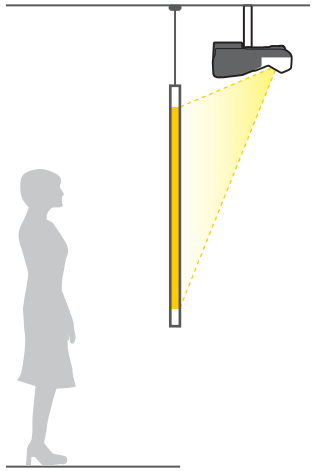
You cannot use the Easy Interactive Function while the Projection setting is **Rear/Upside Down** or **Rear**. (EB-485Wi/EB-480i/EB-475Wi only)

☛ "Easy Interactive Function (EB-485Wi/EB-480i/EB-475Wi only)" p.57

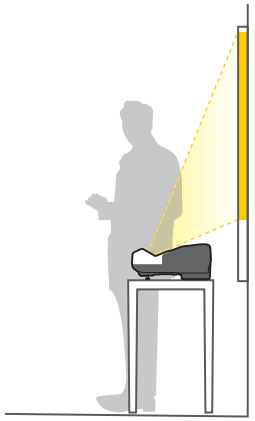
- Mount the projector on a wall or ceiling and project images from in front of a screen. (Front/Upside Down projection)



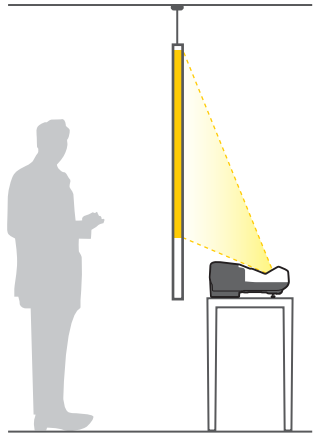
- Mount the projector on a wall or ceiling and project images from behind a translucent screen. (Rear/Upside Down projection)



- Project images from in front of the screen. (Front projection)



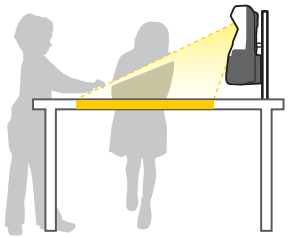
- Project images from behind a translucent screen. (Rear projection)



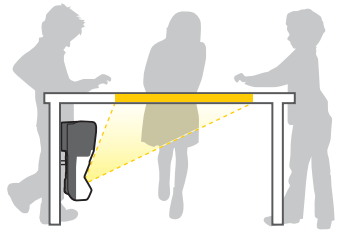
Attach the feet when using the projector on a surface such as a desk.

☛ "Attaching the feet (Only models with feet supplied)" p.14

- Place the projector vertically and project images from in front of the screen. (Front/Upside Down projection)



- Place the projector vertically and project images from behind the screen (Rear/Upside Down projection)



Warning

- A special method of installation is required when suspending the projector from a wall or ceiling. If it is not installed correctly, it could fall causing an accident and injury.
- If you use adhesives on the wall mount plate fixing points or the ceiling mount fixing points to prevent the screws from loosening, or if you use things such as lubricants or oils on the projector, the projector case may crack causing it to fall from its mount. This could cause serious injury to anyone under the mount and could damage the projector.
  When installing or adjusting the mount, do not use adhesives to prevent the screws from loosening and do not use lubricant or oil and so on.
- Do not cover the projector's air intake vent or air exhaust vent. If either of the vents are covered, the internal temperature could rise and cause a fire.

- When mounting the projector on a wall or ceiling, or placing the projector vertically, make sure you use the correct tools for the installation method.
  ☛ "Optional Accessories" p.146
- The default Projection setting is **Front/Upside Down**. You can change to other Projection settings from the Configuration menu.
  ☛ **Extended** - **Projection** p.103
- You can change the Projection setting as follows by pressing down the [A/V Mute] button on the remote control for about five seconds.
  Front↔Front/Upside Down
  Rear↔Rear/Upside Down

The port name, location, and connector orientation differ depending on the source being connected.

Connecting a Computer

To project images from a computer, connect the computer using one of the following methods.

❶ ❷ **When using a commercially available computer cable**

Connect the computer's display output port to the projector's Computer1 or Computer2 port.

You can output audio from the projector's speaker by connecting the computer's audio output port to the projector's Audio1 or Audio2 port using a commercially available audio cable.

❸ **When using the supplied or a commercially available USB cable**

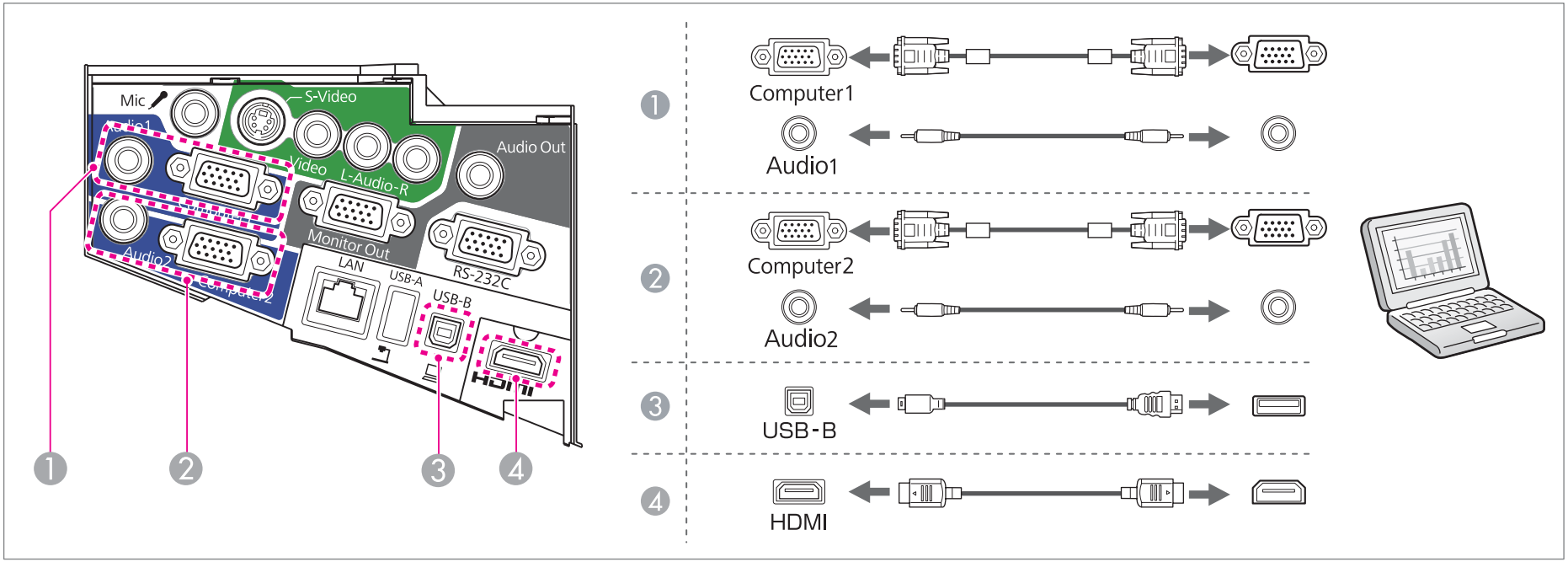
Connect the computer's USB port to the projector's USB-B port.

You can send the audio with the projected image.

❹ **When using a commercially available HDMI cable**

Connect the computer's HDMI port to the projector's HDMI port.

You can send the audio with the projected image.



- If it is difficult to connect the computer cable to the projector's Computer2 port, try disconnecting the cable from the Computer1 port, connecting the cable to the Computer2 port, and then reconnecting the cable to the Computer1 port.
- You can switch the audio input by using **Audio Input**.
  ☛ **Extended** - **Operation** - **Audio Input** p.103
- You can use a USB cable to connect the projector to a computer to project images from the computer. This function is called USB Display.
  ☛ "Projecting with USB Display" p.41

Connecting Image Sources

To project images from DVD players or VHS video and so on, connect to the projector using one of the following methods.

❶ **When using a commercially available video cable**

Connect the video output port on the image source to the projector's Video port using a commercially available video cable.

You can output audio from the projector's speaker by connecting the audio output port on the image source to the projector's Audio-L/R port using a commercially available audio cable.

❷ **When using a commercially available S-video cable**

Connect the video output port on the image source to the projector's S-Video port using a commercially available video cable.

You can output audio from the projector's speaker by connecting the audio output port on the image source to the projector's Audio-L/R port using a commercially available audio cable.

❸ ❹ **When using the optional component video cable**

☛ "Optional Accessories and Consumables" p.146

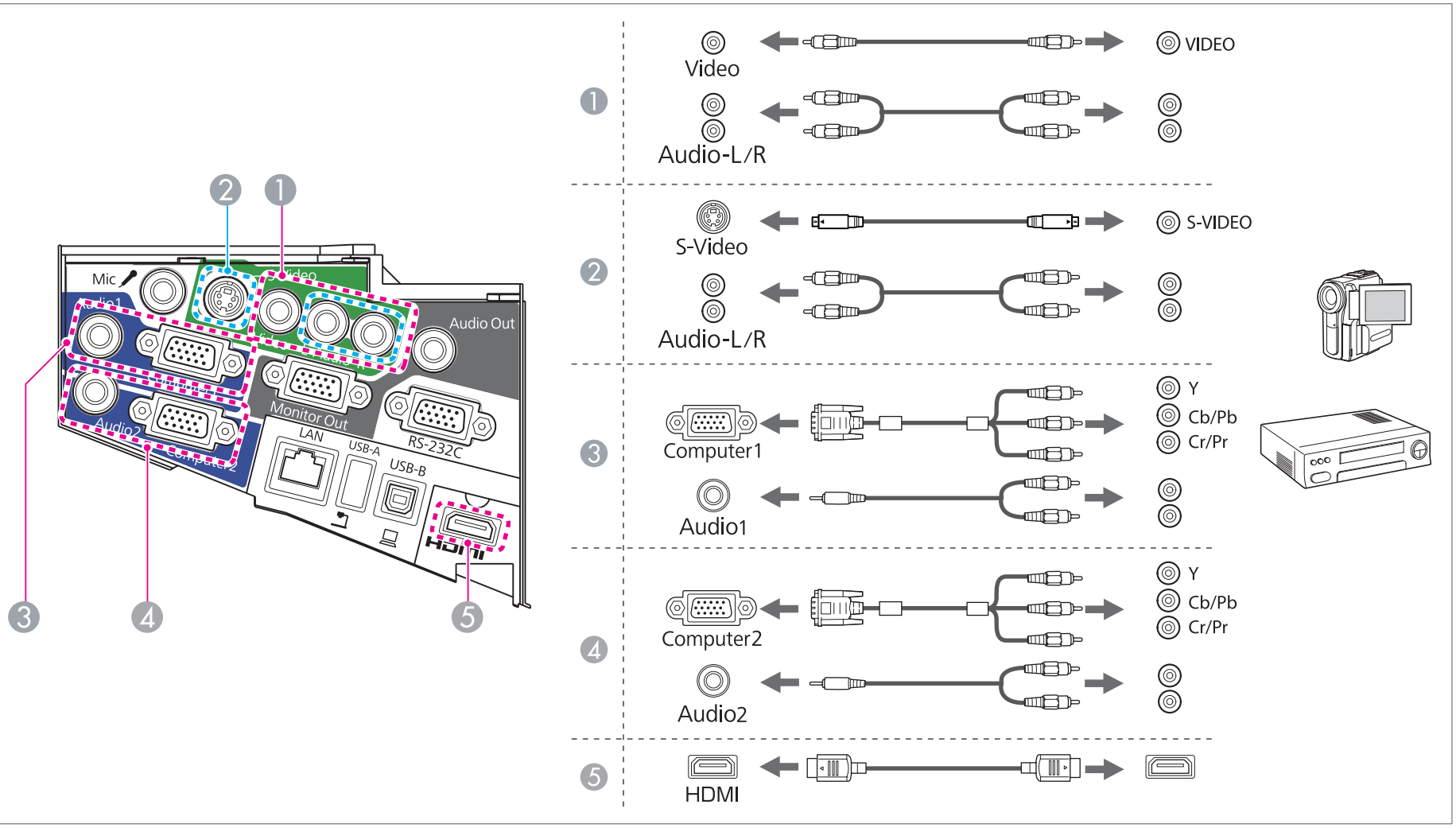
Connect the component output port on the image source to the projector's Computer1 or Computer2 port.

You can output audio from the projector's speaker by connecting the image source's audio output port to the projector's Audio1 or Audio2 port using a commercially available audio cable.

❺ **When using a commercially available HDMI cable**

Connect the HDMI port on the image source to the projector's HDMI port using a commercially available HDMI cable.

You can send the audio with the projected image.



Attention

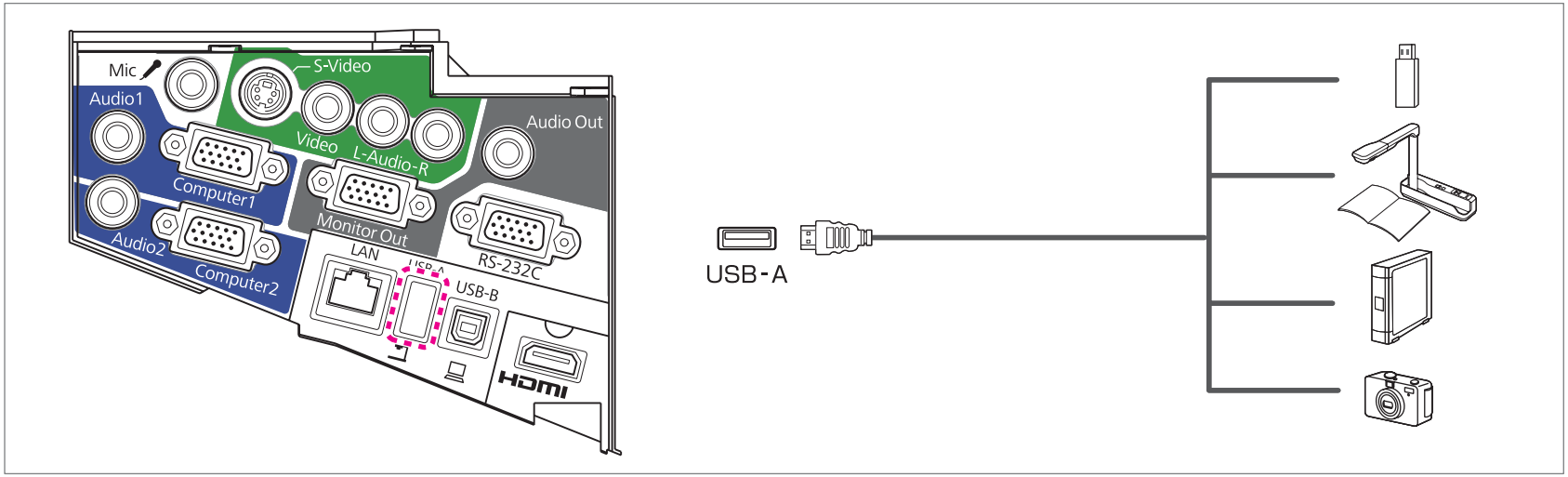
- If the input source is on when you connect it to the projector, it could cause a malfunction.
- If the orientation or shape of the plug differs, do not try to force it in. The device could be damaged or could malfunction.

- You can switch the audio input by using **Audio Input**.
  ☛ **Extended** - **Operation** - **Audio Input** p.103
- If the source you want to connect to has an unusually shaped port, use the cable supplied with the device or an optional cable to connect to the projector.
- When using a commercially available 2RCA(L/R)/stereo mini-pin audio cable, make sure it is labeled "No resistance".

Connecting USB Devices

You can connect devices such as USB memory, the optional Document Camera, and USB compatible hard disks and digital cameras.

Using the USB cable supplied with the USB device, connect the USB device to the USB-A port on the projector.



When the USB device is connected, you can project image files on the USB memory or digital camera using Slideshow.

☛ "Projecting Without a Computer (Slideshow)" p.74

If the Document Camera is connected while projecting images from another input port, press the [USB] button on the remote control, or the [Source Search] button on the control panel, to switch to images from the Document Camera.

☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40

While projecting images from a USB device, if you want to connect an audio output device, connect it to the Audio2 port.

Attention

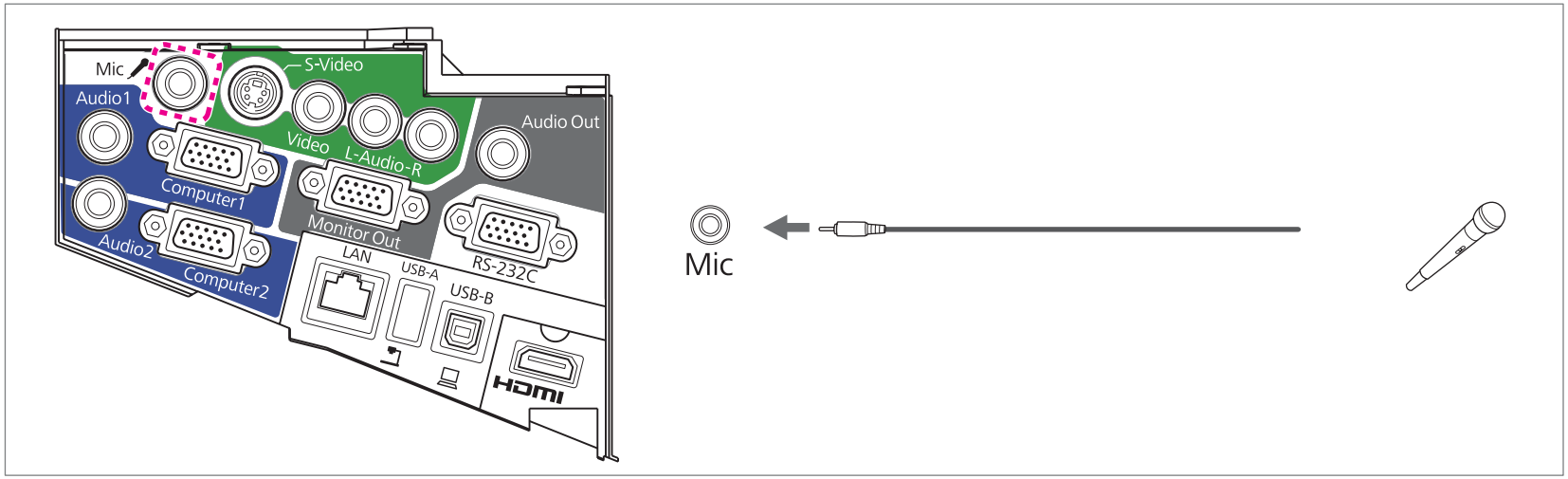
- If you use a USB hub, operation may not be performed correctly. Devices such as digital cameras and USB devices should be connected to the projector directly.
- When connecting and using a USB-compatible hard disk, make sure you connect the AC adaptor supplied with the hard disk.
- Connect a digital camera or hard disk to the projector using a USB cable supplied with or specified for use with the device.
- Use a USB cable less than 3 m in length. If the cable exceeds 3 m, Slideshow may not function correctly.

Removing USB devices

After finishing projecting, remove USB devices from the projector. For devices such as digital cameras or hard disks, turn off the device and then remove it from the projector.

Connecting a microphone

You can output microphone audio from the projector's speaker by connecting a commercially available dynamic microphone.

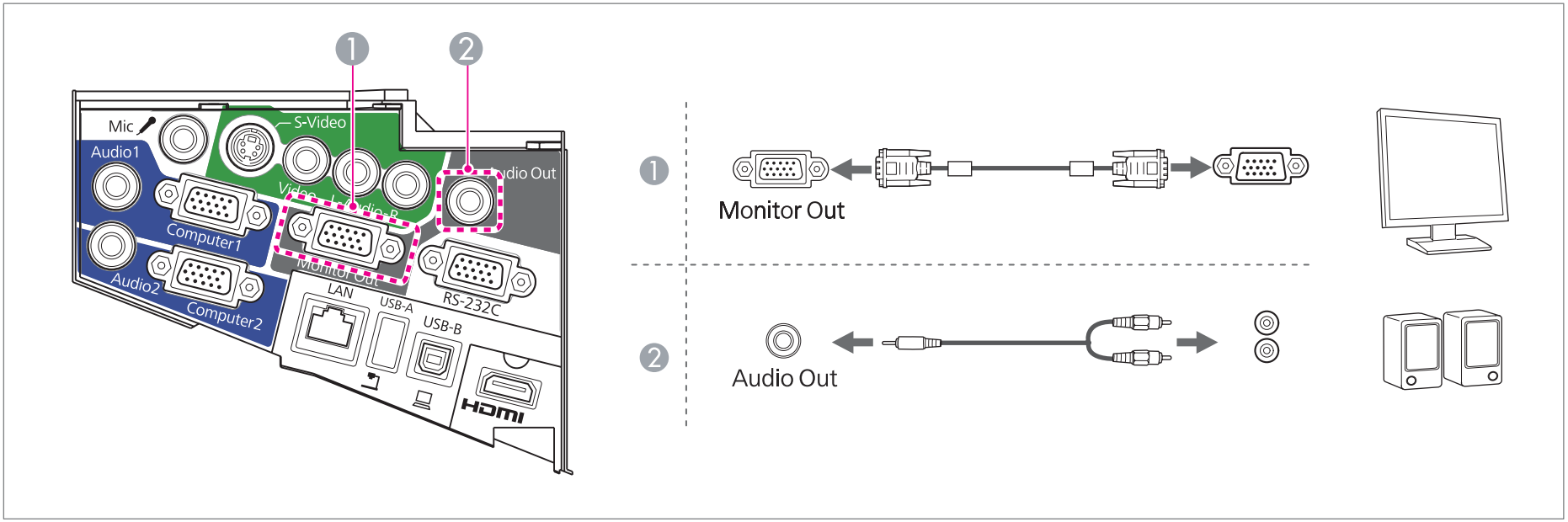


- Plug-in-power is not supported.
- Adjust **Mic Input Level** if the microphone audio is difficult to hear, or if it is too loud resulting in a crackling sound.
  ☛ **Settings** - **Mic Input Level** p.101
- Make the following settings to output audio from a microphone when the projector is in standby mode.
  Set **Standby Mode** to **Communication On**. ☛ **Extended** - **Standby Setup** - **Standby Mode** p.103
  Set **Standby Microphone** to **On**. ☛ **Extended** - **Standby Setup** - **Standby Microphone** p.103

Connecting External Equipment

You can output images and audio by connecting an external monitor or speaker.

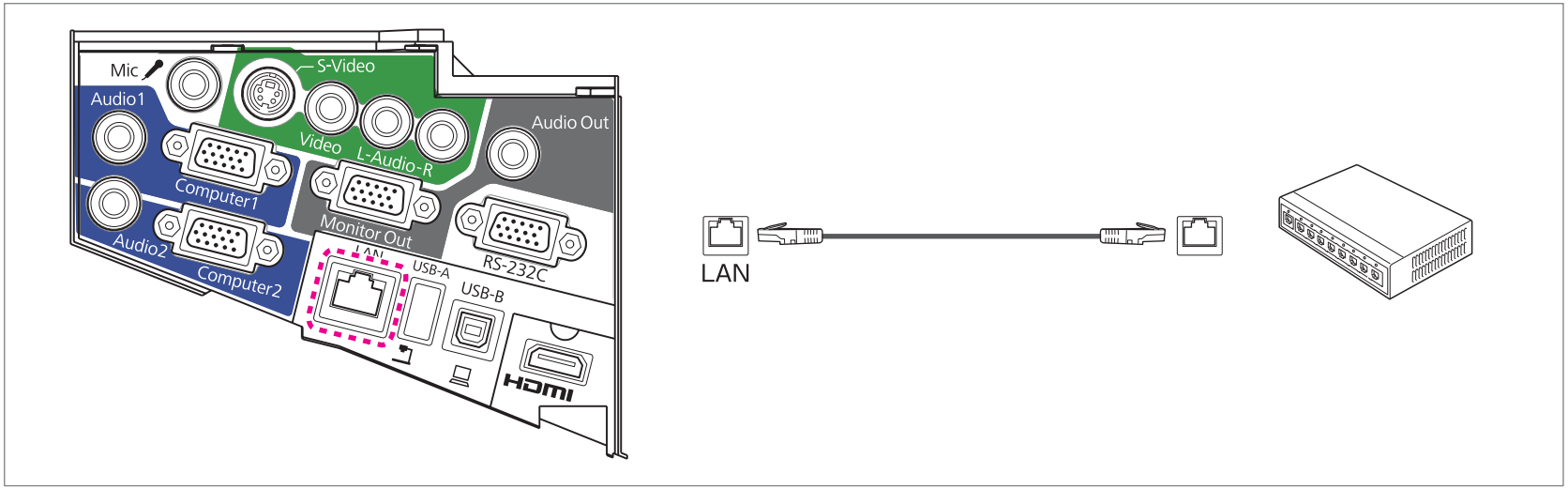
1. **When outputting images to an external monitor**
   Connect the external monitor to the projector's Monitor Out port using the cable supplied with the external monitor.
2. **When outputting audio to an external speaker**
   Connect the external speaker to the projector's Audio Out port using a commercially available audio cable.



- If you set **Standby Mode** to **Communication On**, you can output images to an external monitor even if the projector is in standby mode. You can also output audio to an external speaker. Audio input from the HDMI port, USB-A port, USB-B port, or the LAN port cannot be output.
  ☛ **Extended** - **Standby Setup** - **Standby Mode** p.103
- Only analog RGB signals from the Computer1 port can be output to an external monitor. You cannot output signals input from other ports or component video signals.
- Setting gauges for functions such as Keystone, Configuration menu, or Help screens are not output to the external monitor.
- When the audio cable jack is inserted into the Audio Out port, audio stops being output from the projector's built-in speakers and switches to external output.

Connecting a LAN Cable

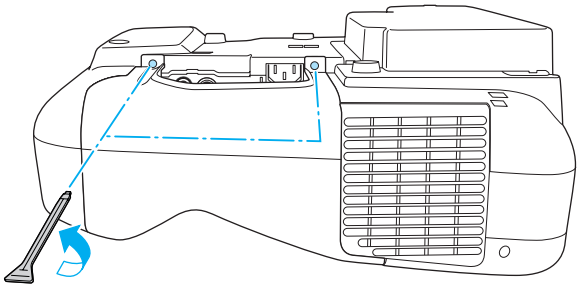
Connect a LAN port on network hubs or other equipment to the projector's LAN port with a commercially available 100BASE-TX or 10BASE-T LAN cable.

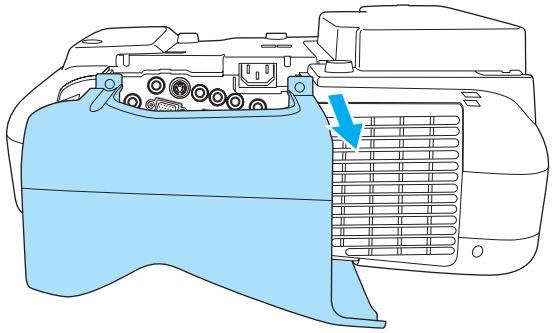


To prevent malfunctions, use a category 5 shielded LAN cable.

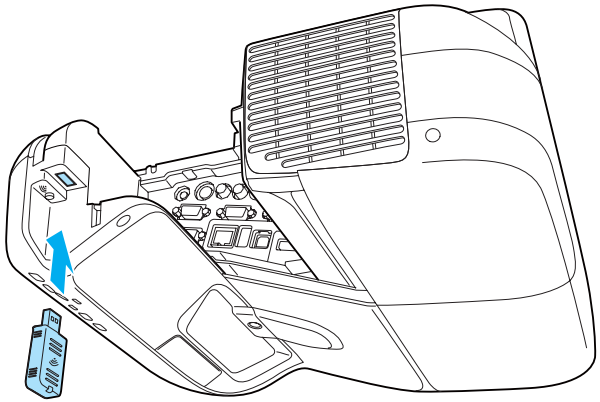
Installing the Optional Wireless LAN Unit

1 Remove both of the cable cover fixing screws to open the cable cover.





2 Install the Wireless LAN unit.

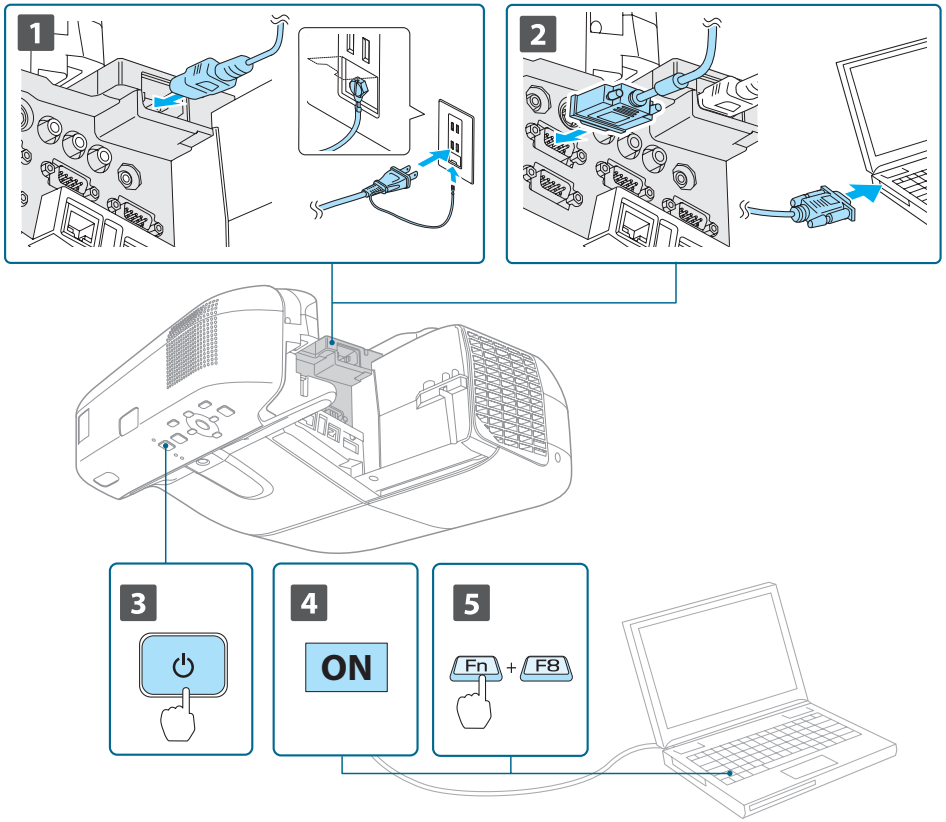


Basic Usage

This chapter explains how to project and adjust images.

From Installation to Projection

This section explains the procedure for connecting the projector to a computer with the computer cable and projecting images.



1 Connect the projector to an electrical outlet with the power cord.

2 Connect the projector to the computer with the computer cable.

3 Turn on the projector.

4 Turn on the computer.

5 Change the computer's screen output.

When using a laptop computer, you need to change the screen output from the computer.

Hold down the Fn key (function key), and press the 🖵/▭ key.

- The method for changing differs depending on the computer being used. See the documentation supplied with the computer.
- Press the [⏻] button twice to turn the projector off.

If the image is not projected, you can change the projected image using one of the following methods.

- Press the [Source Search] button on the control panel or the remote control.
  ☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40
- Press the button for the target port on the remote control.
  ☛ "Switching to the Target Image Using the Remote Control" p.41

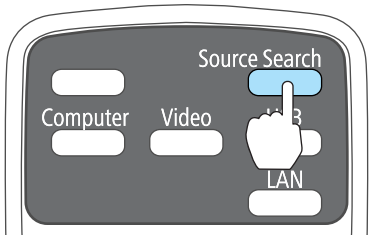
After projecting the image, adjust the image if necessary.

☛ "Correcting Keystone Distortion" p.45
☛ "Correcting the Focus" p.50

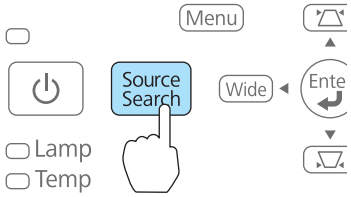
Automatically Detect Input Signals and Change the Projected Image (Source Search)

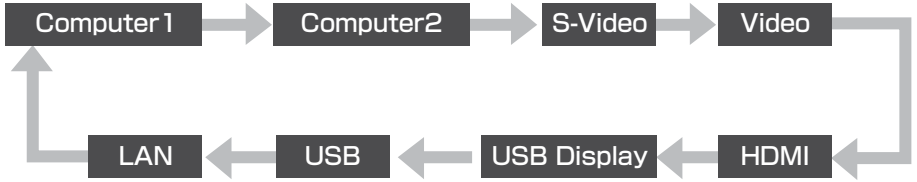
Press the [Source Search] button to project images from the port currently receiving an image.

Using Remote Control



Using the Control Panel

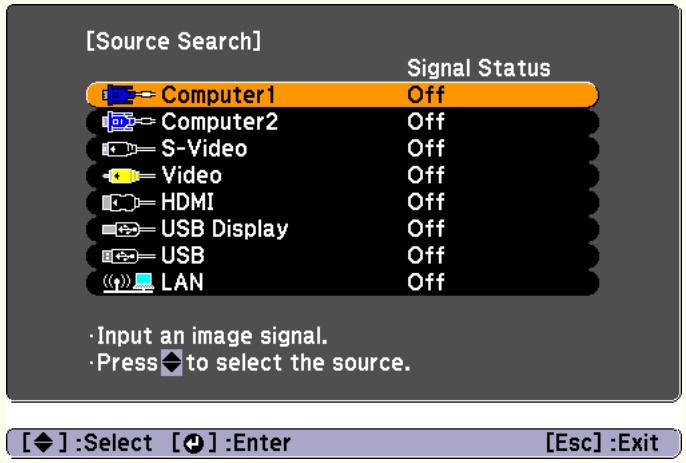




When two or more image sources are connected, press the [Source Search] button until the target image is projected.

When your video equipment is connected, start playback before beginning this operation.

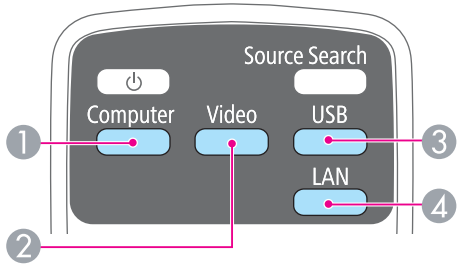
The following screen is displayed while no image signals are input.



Switching to the Target Image Using the Remote Control

You can change directly to the target image by pressing the following buttons on the remote control.

Remote control



1. Each time the button is pressed, it cycles through the images being input from the following sources.
   - Computer1 port
   - Computer2 port
2. Each time the button is pressed, it cycles through the images being input from the following sources.
   - S-Video port
   - Video port
   - HDMI port
3. Each time the button is pressed, it cycles through the images being input from the following sources.
   - USB Display
   - Images from the device connected to the USB-A port
4. Changes to the images projected with EasyMP Network Projection. When projecting using the optional Quick Wireless Connection USB Key, this button switches to that image.

Projecting with USB Display

You can use the supplied or a commercially available USB cable to connect the projector to a computer to project images from the computer.

You can send the computer's audio with the projected image.

Set **USB Type B** to **USB Display/Easy Interactive Function** or **Wireless Mouse/USB Display** to use USB Display on EB-485Wi/EB-480i/EB-475Wi.

☛ **Extended - USB Type B** p.103

System requirements

For Windows

OS	Windows 2000*1	
	Windows XP	Professional 32 bit Home Edition 32 bit Tablet PC Edition 32 bit
	Windows Vista	Ultimate 32 bit Enterprise 32 bit Business 32 bit Home Premium 32 bit Home Basic 32 bit
	Windows 7	Ultimate 32/64 bit Enterprise 32/64 bit Professional 32/64 bit Home Premium 32/64 bit Home Basic 32 bit Starter 32 bit
CPU	Mobile Pentium III 1.2 GHz or faster Recommended: Pentium M 1.6 GHz or faster	

Amount of Memory	256 MB or more Recommended: 512 MB or more
Hard Disk Space	20 MB or more
Display	Resolution of no less than 640x480 and no higher than 1600x1200. Display color of 16-bit color or greater

*1 Service Pack 4 only

For Mac OS X

OS	Mac OS X 10.5.x 32 bit Mac OS X 10.6.x 32/64 bit Mac OS X 10.7.x 32/64 bit
CPU	Power PC G4 1GHz or faster Recommended: Core Duo 1.83GHz or faster
Amount of Memory	512 MB or more
Hard Disk Space	20 MB or more
Display	Resolution of no less than 640x480 and no higher than 1680x1200. Display color of 16-bit color or greater

Connecting for the first time

The first time you connect the projector and the computer using the USB cable, the driver needs to be installed. The procedure is different for Windows and Mac OS X.

- You do not need to install the driver the next time you connect.
- When inputting images from multiple sources, change the input source to USB Display.
- If you are using a USB hub, operations may not be performed correctly. Connect the USB cable directly to the projector.
- You cannot change option settings while using USB Display.

For Windows

1. Connect the computer's USB port to the projector's USB-B port using the supplied or a commercially available USB cable.

   For Windows 2000 or Windows XP, a message asking you if you want to restart your computer may be displayed. Select **No**.

   For Windows 2000

   Double-click **Computer**, **EPSON PJ_UD**, and then **EMP_UDSE.EXE**.

   For Windows XP

   Driver installation starts automatically.

   For Windows Vista/Windows 7

   When the dialog box is displayed, click **Run EMP_UDSE.exe**.

2. When the License Agreement screen is displayed, click **Agree**.

3 Computer images are projected.

It may take a while for computer images to be projected. Until the computer images are projected, leave the equipment as is and do not disconnect the USB cable or turn off the power of the projector.

4 Disconnect the USB cable when you are finished.

When disconnecting the USB cable, there is no need to use **Safely Remove Hardware**.

- If it is not installed automatically, double-click **My Computer** - **EPSON_PJ_UD** - **EMP_UDSE.EXE** on your computer.
- If nothing is projected for some reason, click **All Programs** - **EPSON Projector** - **Epson USB Display** - **Epson USB Display Vx.xx** on your computer.
- When using a computer running Windows 2000 under user authority, a Windows error message is displayed and you may not be able to use the software. In this case, try updating Windows to the latest version, restart, and then try to connect again.

  For more details, contact your local dealer or the nearest address provided in the following document.

  ☛ *Epson Projector Contact List*

For Mac OS X

1 Connect the computer's USB port to the projector's USB-B port using the supplied or a commercially available USB cable.

The Setup folder of USB Display is displayed in the Finder.

2 Double-click the **USB Display Installer** icon.

3 Follow the on-screen instructions to install.

4 When the License Agreement screen is displayed, click **Agree**.

Enter the administrator authority password and start the installation.

When the installation is complete, the USB Display icon is displayed in the Dock and menu bar.

5 Computer images are projected.

It may take a while for computer images to be projected. Until the computer images are projected, leave the equipment as is and do not disconnect the USB cable or turn off the power of the projector.

6 When you have finished, select **Disconnect** from the menu bar or from the **USB Display** icon on the Dock. You can then disconnect the USB cable.

- If the USB Display setup folder is not displayed automatically in the Finder, double-click **EPSON PJ_UD** - **USB Display Installer** on your computer.
- If nothing is projected for some reason, click the **USB Display** icon in the Dock.
- If there is no **USB Display** icon in the Dock, double-click **USB Display** from the Applications folder.
- If you select **Exit** from the **USB Display** icon menu on the Dock, USB Display does not start automatically when you connect the USB cable.

Uninstalling

For Windows 2000

1 Click **Start**, select **Settings**, and then click **Control Panel**.

2 Double-click **Add/Remove Programs**.

3 Click **Change or Remove Programs**.

4 Select **Epson USB Display** and click **Change/Remove**.

For Windows XP

1. Click **Start**, and then click **Control Panel**.
2. Double-click **Add or Remove Programs**.
3. Select **Epson USB Display** and click **Remove**.

For Windows Vista/Windows 7

1. Click **Start**, and then click **Control Panel**.
2. Click **Uninstall a program** under **Programs**.
3. Select **Epson USB Display** and click **Uninstall**.

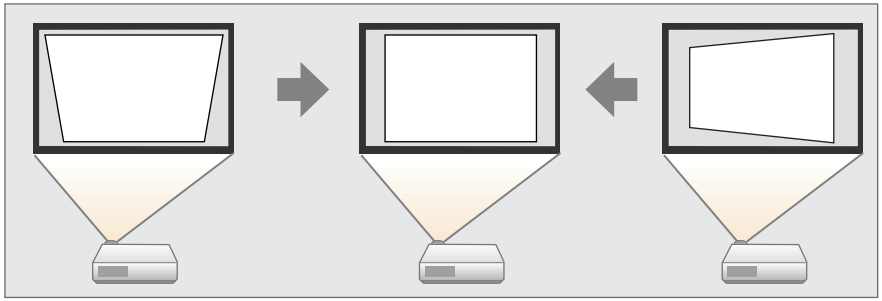
For Mac OS X

1. Open the **Applications** folder, double-click **USB Display**, and then double-click **Tool**.
2. Run **USB Display Uninstaller**.

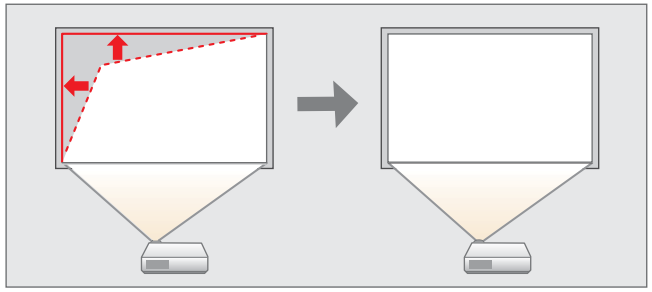
Correcting Keystone Distortion

You can correct keystone distortion using one of the following methods.

- H/V-Keystone
  Manually correct distortion in the horizontal and vertical directions independently.



- Quick Corner
  Manually correct the four corners independently.



When you correct keystone distortion, the projected image may be reduced.

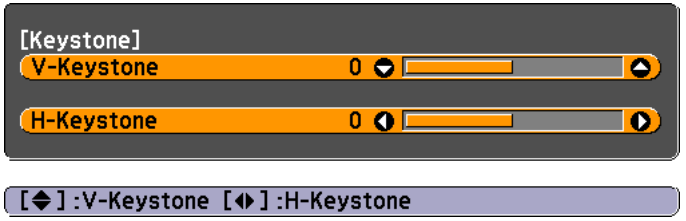
H/V-Keystone

Manually correct distortion in the horizontal and vertical directions independently. H/V-Keystone correction is ideal for fine-tuning keystone distortion.

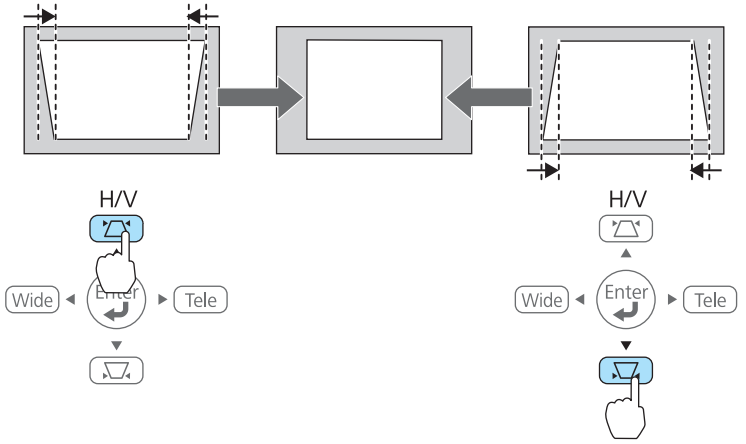
You can use H/V-Keystone to correct the projected image under the following conditions.

Correction angle: Approx. 5˚ right and left/Approx. 5˚ up and down

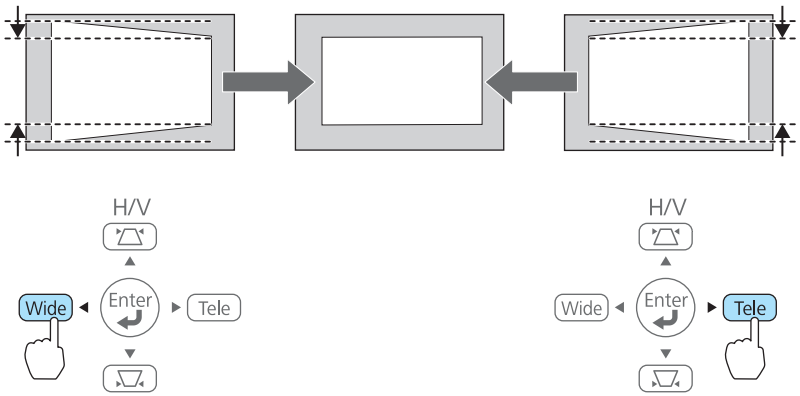
1 Press the [⏢] or [⏢] buttons on the control panel during projection to display the Keystone screen.



2 Press the following buttons to correct keystone distortion.
Press the [⏢] or [⏢] buttons to correct vertical distortion.



Press the [Tele] or [Wide] buttons to correct horizontal distortion.



You can set H/V-Keystone from the Configuration menu.

☛ **Settings** - **Keystone** - **H/V-Keystone** p.101

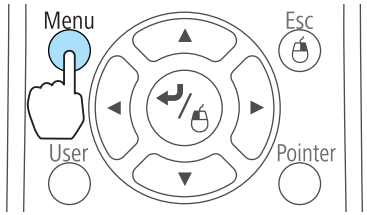
Quick Corner

This allows you to manually correct each of the four corners of the projected image separately.

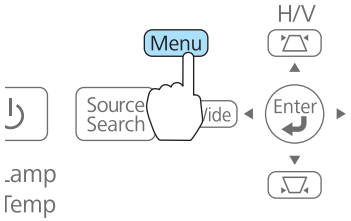
1 Press the [Menu] button while projecting.

☛ "Using the Configuration Menu" p.95

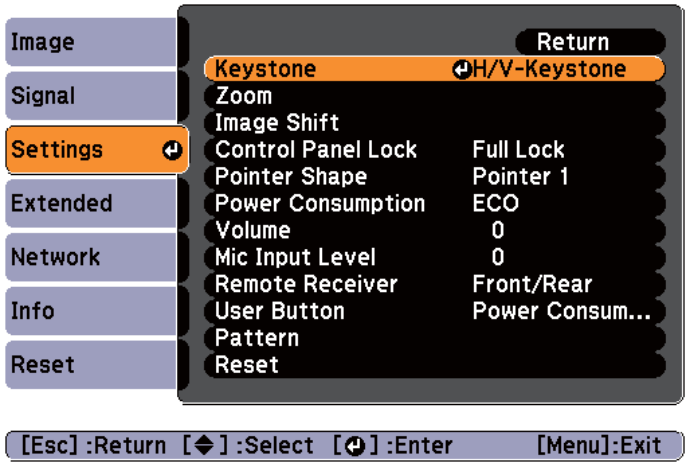
Using Remote Control



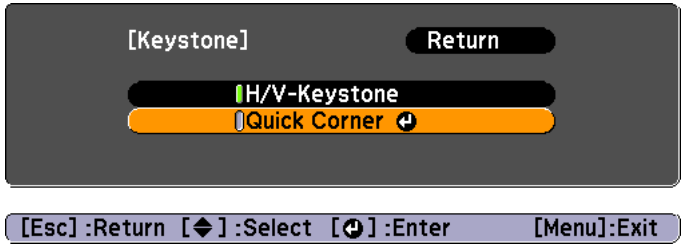
Using the Control Panel



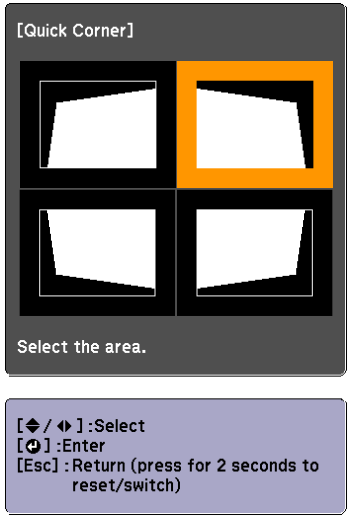
2 Select **Keystone** from **Settings**.



3 Select **Quick Corner**, and then press the [↵] button.



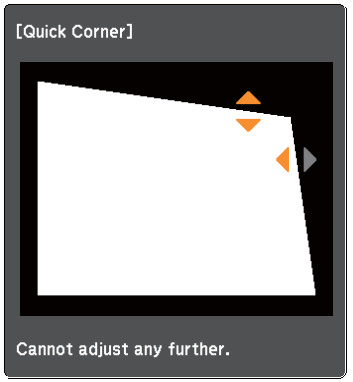
4 Select the corner to correct using the [△], [▽], [◁], and [▷] buttons on the remote control, or the [⏢], [⏢], [Wide], and [Tele] buttons on the control panel, and then press the [↵] button.



5 Correct the position of the corner using the [▲], [▼], [◀], and [▶] buttons on the remote control, or the [⏢], [⏢], [Wide], and [Tele] buttons on the control panel.

When you press the [↵] button, the screen shown in step 4 is displayed.

If the message "Cannot adjust any further." is displayed while adjusting, you cannot adjust the shape any further in the direction indicated by the gray triangle.



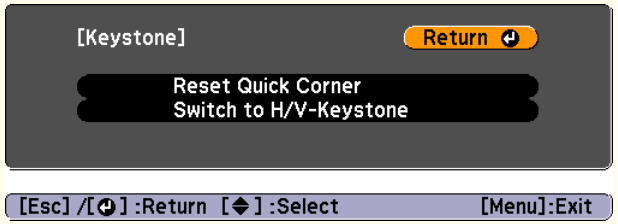
6 Repeat procedures 4 and 5 as needed to adjust any remaining corners.

7 When you are done, press the [Esc] button to exit the correction menu.

Because **Keystone** was changed to **Quick Corner**, the corner selection screen shown in step 4 is displayed the next time you press the [⏢] or [⏢] buttons on the control panel. Change **Keystone** to **H/V-Keystone** if you want to perform horizontal and vertical correction using the [⏢] and [⏢] buttons on the control panel.

☛ **Settings** - **Keystone** - **H/V-Keystone** p.101

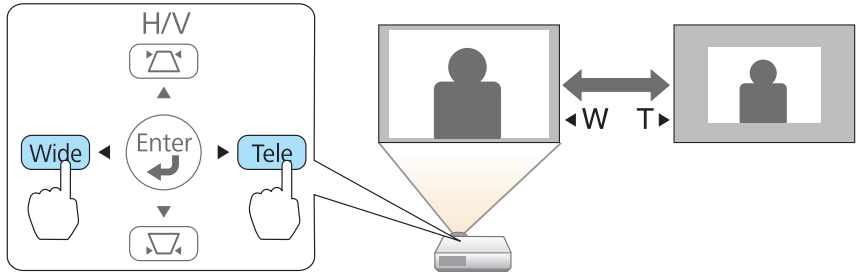
If the [Esc] button is held down for about two seconds while the corner selection screen from step 4 is displayed, the following screen is displayed.



Reset Quick Corner: Resets the result of Quick Corner corrections.
Switch to H/V-Keystone: Switches the correction method to **H/V-Keystone**.
☛ "Settings Menu" p.101

Adjusting the Image Size

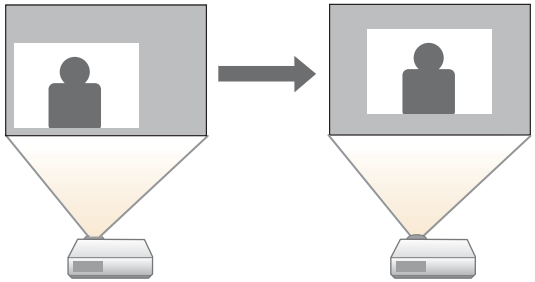
Press the [Wide] and [Tele] buttons on the control panel to adjust the size of the projected image.



You can also make adjustments from the configuration menu.
☛ **Settings** - **Zoom** p.101

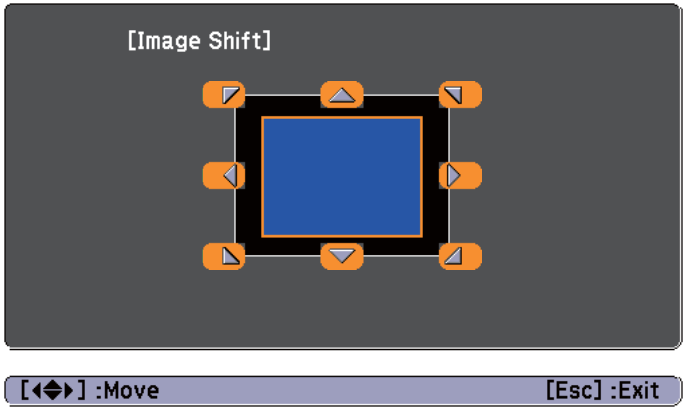
Adjusting the Position of the Image (Image Shift)

You can fine tune the position of the image without moving the projector.

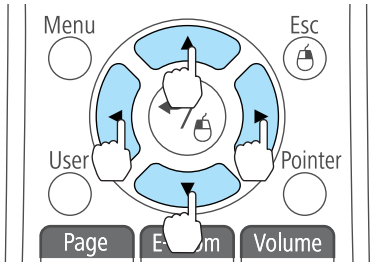


1. Perform Adjust Zoom or Keystone.
☛ "Adjusting the Image Size" p.48
☛ "Correcting Keystone Distortion" p.45
The Image Shift screen is displayed after you have made adjustments.

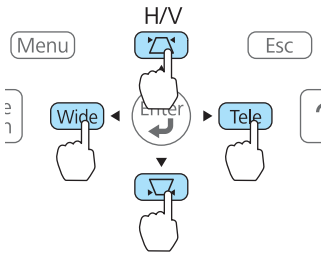
2. Adjust the position of the projected image.



Using Remote Control



Using the Control Panel



You can shift the image diagonally by pressing any pair of adjacent [▲], [▼], [◀], and [▶] buttons, or a combination of [⧄], [⧅], [Wide], and [Tele] buttons.

3 Press the [Esc] button to close the adjustment screen.

The adjustment screen disappears if no operation is performed after approximately 10 seconds.

- You cannot adjust the image position when Zoom is set to the maximum **Wide** position.
- The Image Shift setting is retained even if the projector is turned off. You need to re-adjust the position if you change the installation location or angle of the projector.
- You can also use the Configuration menu to adjust the position of the image.

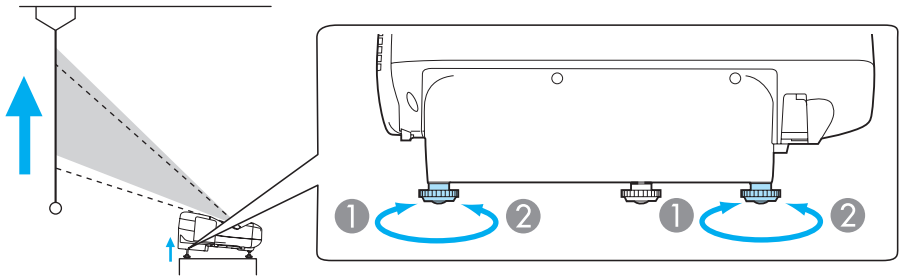
☛ **Settings** - **Image Shift** p.101

Adjusting the Vertical Position of the Image (Models Supplied with the Feet Only)

Extend the feet. You can adjust the vertical position of the image by tilting the projector up to 1.5˚.

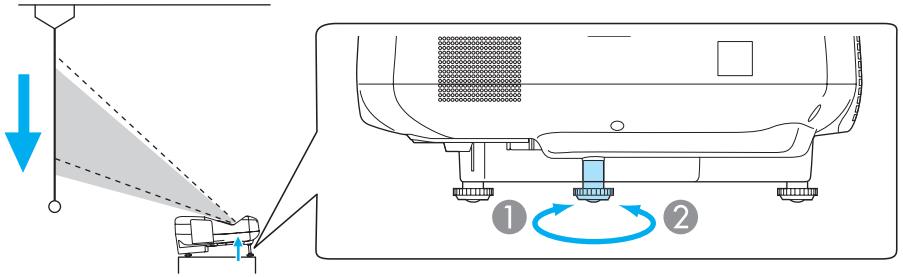
The larger the angle of tilt, the harder it becomes to focus. Install the projector so that it only needs to be tilted at a small angle.

Raising the height of the image



1. You can raise the height of the image by extending the rear feet.
2. Retract the rear feet to return the image to its original height.

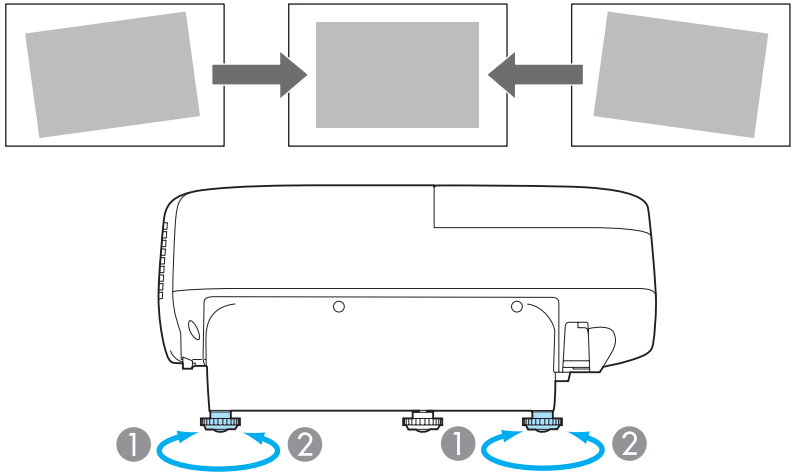
Lowering the height of the image



1. You can lower the height of the image by extending the front foot.
2. Retract the front foot to return the image to its original height.

Adjusting the Horizontal Position of the Image (Models Supplied with the Feet Only)

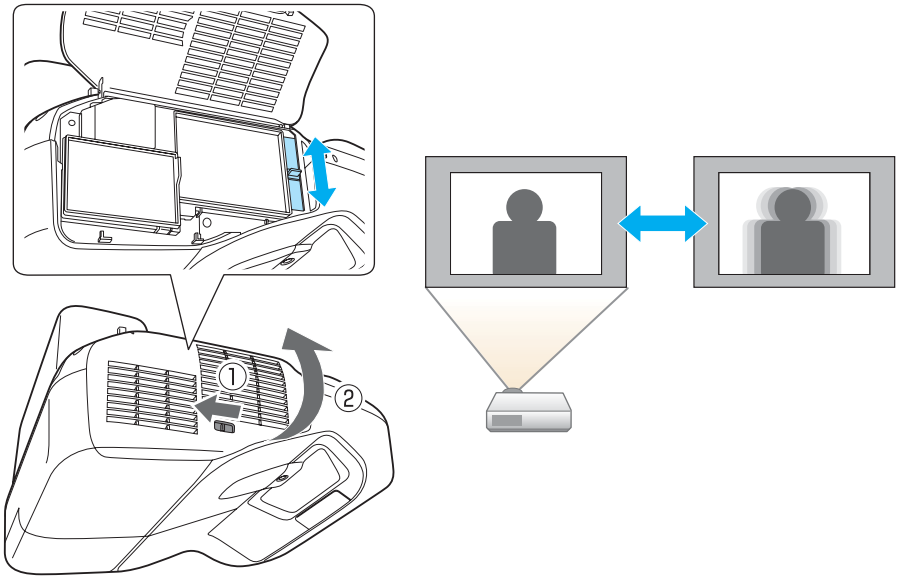
Extend and retract the rear feet to adjust the projector's horizontal tilt.



1. Extend the rear foot.
2. Retract the rear foot.

Correcting the Focus

You can correct the focus using the focus lever.

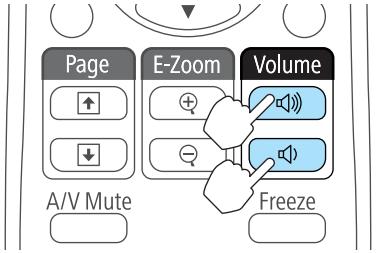


Adjusting the Volume

You can adjust the volume using one of the following methods.

- Press the [Volume] buttons on the remote control to adjust the volume.
  [🔉] Decreases the volume.
  [🔊] Increases the volume.

Remote control



- Adjust the volume from the Configuration menu.
  ☛ **Settings** - **Volume** p.101

> **⚠ Caution**
>
> Do not start when the volume is set too high.
> A sudden increase in volume may cause loss of hearing. Always lower the volume before powering off, so that you can power on and then gradually increase the volume.

Selecting the Projection Quality (Selecting Color Mode)

You can easily obtain the optimum image quality simply by selecting the setting that best corresponds to your surroundings when projecting. The brightness of the image varies depending on the mode selected.

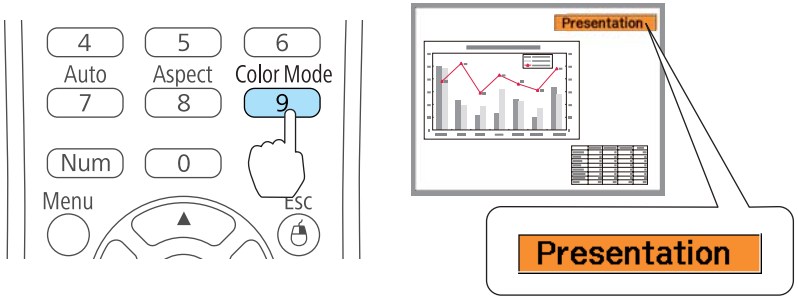
Mode	Application
Dynamic	Ideal for use in a bright room. This is the brightest mode, and reproduces shadow tones well.
Presentation	Ideal for making presentations using color materials in a bright room.
Theatre	Ideal for watching films in a dark room. Gives images a natural tone.
Photo*1	Ideal for projecting still pictures, such as photos, in a bright room. The images are vivid and brought into contrast.
Sports*2	Ideal for watching TV programmes in a bright room. The images are vivid and brought to life.
sRGB	Ideal for images that conform to the sRGB color standard.
Blackboard	Even if you are projecting onto a blackboard (greenboard), this setting gives your images a natural tint, just like when projecting onto a screen.
Whiteboard	Ideal for making presentations using a whiteboard.

*1 This selection is only available when the input signal is RGB or when the source is USB Display, USB, or LAN.

*2 This selection is only available when the input signal is component video, or when the input source is Video or S-Video.

Each time you press the [Color Mode] button, the Color Mode name is displayed on the screen and the Color Mode changes.

Remote control



You can set Color Mode from the Configuration menu.

☛ **Image** - **Color Mode** p.98

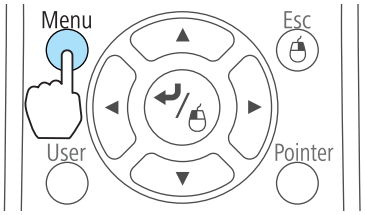
Setting Auto Iris

By automatically setting the luminance according to the brightness of the displayed image, it lets you enjoy deep and rich images.

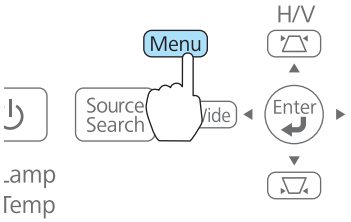
1 Press the [Menu] button.

☛ "Using the Configuration Menu" p.95

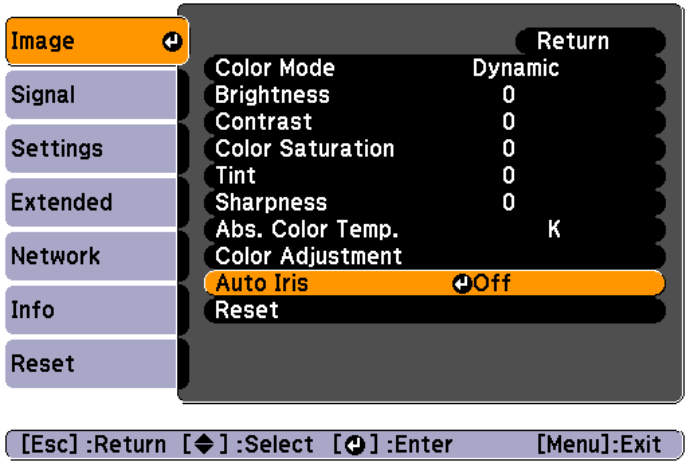
Using Remote Control



Using the Control Panel



2 Select **Auto Iris** from **Image**.



3 Select **On**.

The setting is stored for each Color Mode.

4 Press the [Menu] button to finish making settings.

Auto Iris can only be set when the **Color Mode** is set to **Dynamic** or **Theatre**.

Changing the Aspect Ratio of the Projected Image

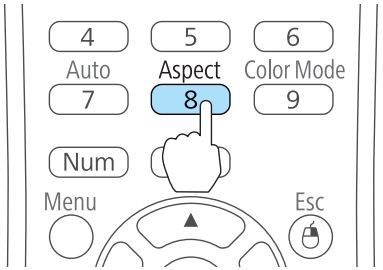
You can change the Aspect Ratio of the projected image to suit the type, the ratio of height and width, and the resolution of the input signals.

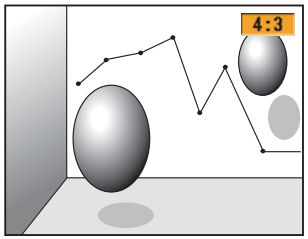
Available Aspect Modes vary depending on the image signal currently being projected.

Changing methods

Each time you press the [Aspect] button on the remote control, the aspect mode name is displayed on the screen and the aspect ratio changes.

Remote control





You can set the aspect ratio from the Configuration menu.

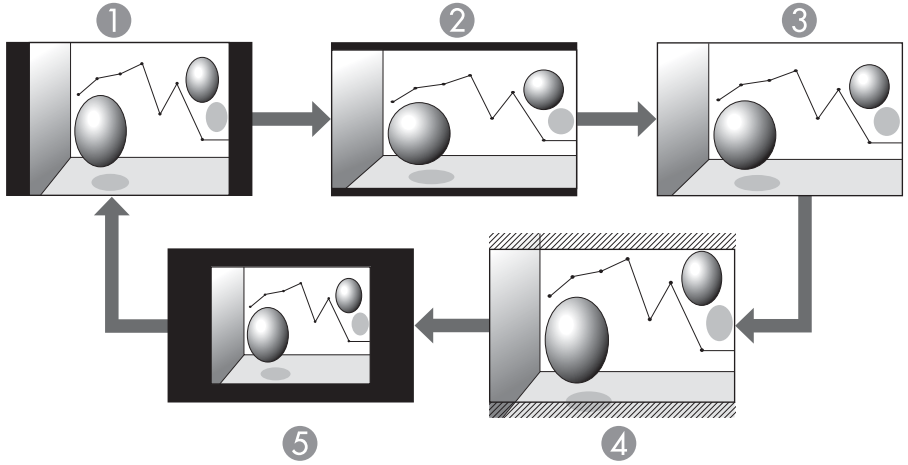
☛ **Signal** - **Aspect** p.99

Changing the aspect mode (EB-485Wi/EB-485W/EB-475Wi/EB-475W only)

Projecting images from video equipment or from the HDMI port

Each time the [Aspect] button on the remote control is pressed, the aspect mode changes in the order **Normal** or **Auto**, **16:9**, **Full**, **Zoom**, and **Native**.

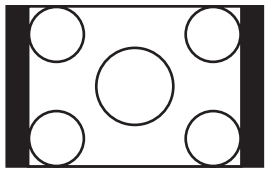
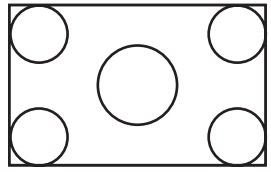
Example: 1080p signal input (resolution: 1920x1080, aspect ratio: 16:9)

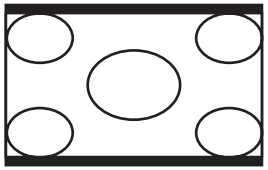
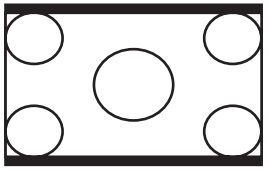
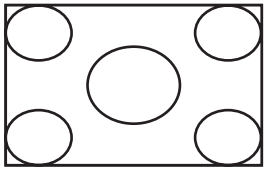
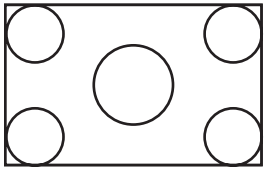
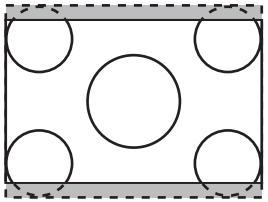
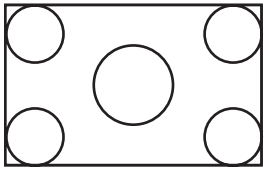
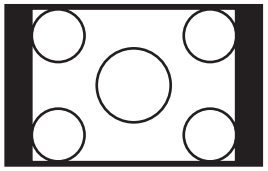
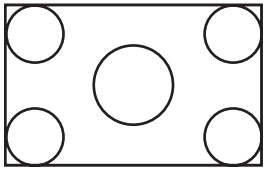


1. Normal or Auto
2. 16:9
3. Full
4. Zoom
5. Native

Projecting images from a computer

The following shows projection examples for each aspect mode.

Aspect mode	Input Signal	
	XGA 1024X768(4:3)	WXGA 1280X800(16:10)
Normal		

Aspect mode	Input Signal	
	XGA 1024X768(4:3)	WXGA 1280X800(16:10)
16:9		
Full		
Zoom		
Native		

If parts of the image are missing, set the **Resolution** setting to **Wide** or **Normal** from the Configuration menu, according to the size of the computer panel.

☛ **Signal** - **Resolution** p.99

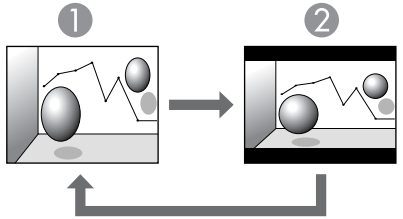
Changing the aspect mode (EB-480i/EB-480/EB-470 only)

Projecting images from video equipment

Each time the [Aspect] button is pressed, the aspect mode changes in the order **4:3** and **16:9**.

When inputting a 720p/1080i signal and the aspect mode is set to **4:3**, a 4:3 zoom is applied (the right and left sides of the image are cut off).

Example: 720p signal input (resolution: 1280x720, aspect ratio: 16:9)

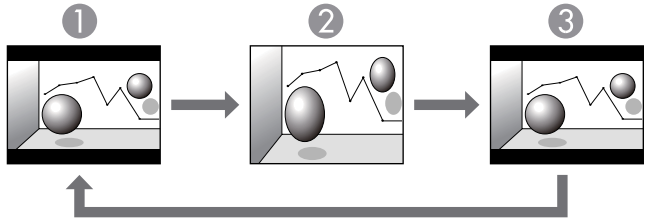


1 4:3
2 16:9

Projecting images from the HDMI port

Each time the [Aspect] button is pressed, the aspect mode changes in the order **Auto**, **4:3**, and **16:9**.

Example: 1080p signal input (resolution: 1920x1080, aspect ratio: 16:9)



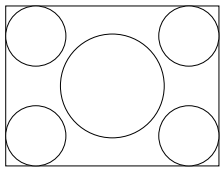
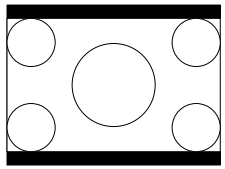
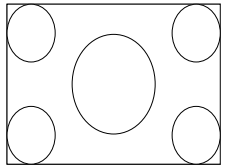
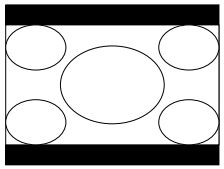
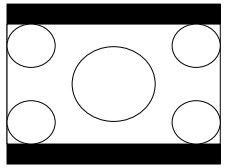
1 Auto

② 4:3
③ 16:9

Projecting images from a computer

Each time the [Aspect] button is pressed, the aspect mode changes in the order **Normal**, **4:3**, and **16:9**.

The following shows projection examples for each aspect mode.

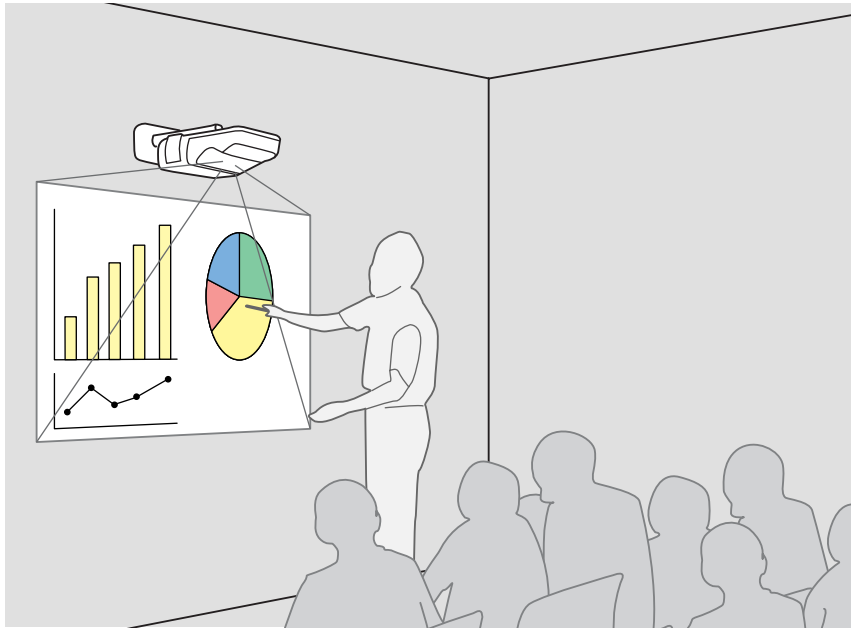
Aspect mode	Input Signal	
	XGA 1024X768(4:3)	WXGA 1280X800(16:10)
Normal		
4:3		
16:9		

If parts of the image are missing, set the **Resolution** setting to **Wide** or **Normal** from the Configuration menu, according to the size of the computer panel.

☛ **Signal** - **Resolution** p.99

Useful Functions

This chapter explains useful functions for giving presentations and so on, and the security functions.



Introducing the Easy Interactive Function

The Easy Interactive Function allows you to perform the following operations using the Easy Interactive Pen.

Drawing with the projector's built-in function

You can write and draw on the projected screen using the projector's built-in drawing function without having to use any additional software.

You can draw on any image source.

☛ "Drawing with the Projector's Built-in Function" p.58

Operating as a mouse and drawing by connecting to a computer (Computer Interactive)

You can connect the projector to a computer to operate the computer from the projected screen. This makes presentations and lessons effective and easy to understand.

Two people can use Easy Interactive Pens simultaneously by using the supplied drawing software Easy Interactive Tools.

☛ "Operating as a mouse and drawing by connecting to a computer (Computer Interactive)" p.64

Attention

The Easy Interactive Function operates by infrared communication. Note the following important points when using this function.

- Make sure there is no strong light or sunlight shining on the Easy Interactive Function receiver or the projection screen.
- If there is any dust stuck to the Easy Interactive Function receiver, it could interfere with infrared communication and you may not be able to use the function normally.
- Do not put paint or any stickers on the cover of the Easy Interactive Function receiver.
- Install the projector so that the Easy Interactive Function receiver is not too close to fluorescent lights.
- Do not use an infrared remote control or infrared microphone in the same room because the Easy Interactive Pen may malfunction.
- The Easy Interactive Function may be interrupted by electromagnetic interference from nearby equipment (such as electric motors or transformers).
- The Easy Interactive Pen is not waterproof. Do not use it with wet hands, or in locations where it may get wet.
- Do not hold the black section of the pen tip of the Easy Interactive Pen, and make sure this section does not get damaged or soiled. Otherwise, the Easy Interactive Pen may not work.
- When operating Keystone, performance for the Easy Interactive Function may decline.

Drawing with the Projector's Built-in Function

Procedure

1. Turn on the projector.
2. Perform the pen calibration.
   You can skip this step if pen calibration is already complete.
   ☛ "Calibrating the pen" p.59
3. Put the Easy Interactive Pen close to the projected screen near the toolbar tabs [ ] on the left and right of the screen.
4. Click one of the toolbar tabs [ ].
   The toolbar is displayed.

When the toolbar is displayed, you can write on the projected screen using the Easy Interactive Pen.

☛ "Easy Interactive Pen (EB-485Wi/EB-480i/EB-475Wi Only)" p.20

☛ "Toolbar functions" p.62

The projector's built-in drawing function is not available if both of the following conditions are met.

- **Extended** - **USB Type B** is set to **Easy Interactive Function** or **USB Display/Easy Interactive Function** from the configuration menu.
- Images are projected from the source specified in **Extended** - **Easy Interactive Function** - **Use Source** from the configuration menu.

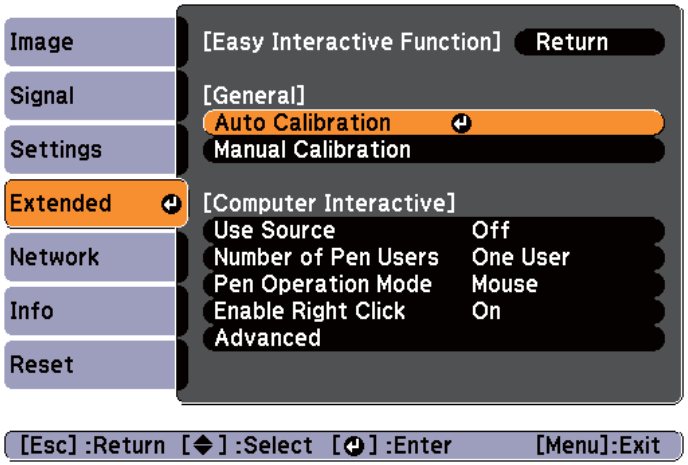
Calibrating the pen

You need the Easy Interactive Pen to use the Easy Interactive Function. Make sure you perform pen calibration when using the Easy Interactive Pen for the first time so that the projector recognizes the position of the pen correctly.

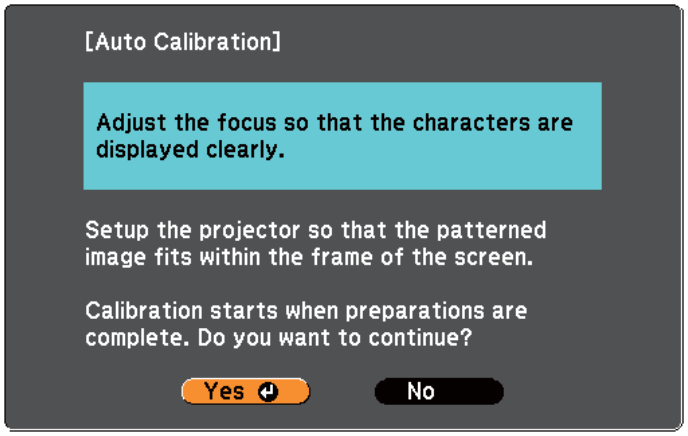
Auto Calibration

This function automatically calibrates the pen.

1. Set **Extended** - **Easy Interactive Function** to **Auto Calibration** from the configuration menu.



2. Adjust the focus by following the on-screen instructions.


[Auto Calibration]
Adjust the focus so that the characters are displayed clearly.
Setup the projector so that the patterned image fits within the frame of the screen.
Calibration starts when preparations are complete. Do you want to continue?
Yes
No

☛ "Correcting the Focus" p.50

3 Select "Yes".

Use the [↵] button on the remote control or control panel to select "Yes". You cannot select Easy Interactive Pen when performing operations from the configuration menu.

4 The pattern image is projected and calibration starts.

Wait until calibration is complete.

Do not obstruct the projected light while the pattern image is being projected.

- Select [ ] using Easy Interactive Pen on the toolbar and execute Auto Calibration if the discrepancy is small.
- However, execute Auto Calibration from the remote control or control panel when you are calibrating the pen for the first time.
- For pen positioning, do not switch between making operations using the remote control and making operations using the Easy Interactive Pen.

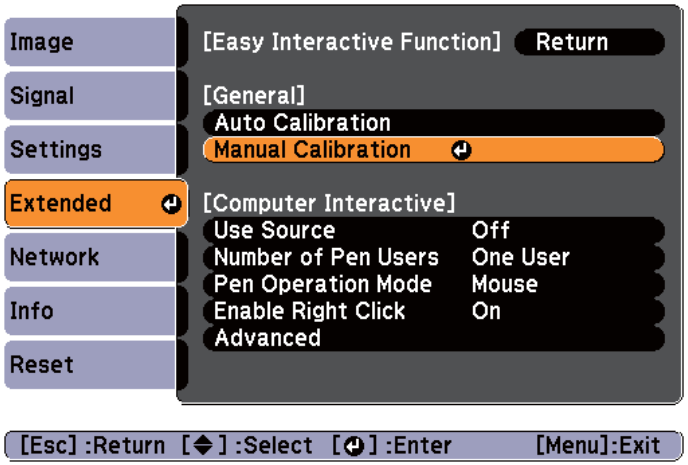
If Auto Calibration is unsuccessful, try Manual Calibration.

☛ "Manual Calibration" p.60

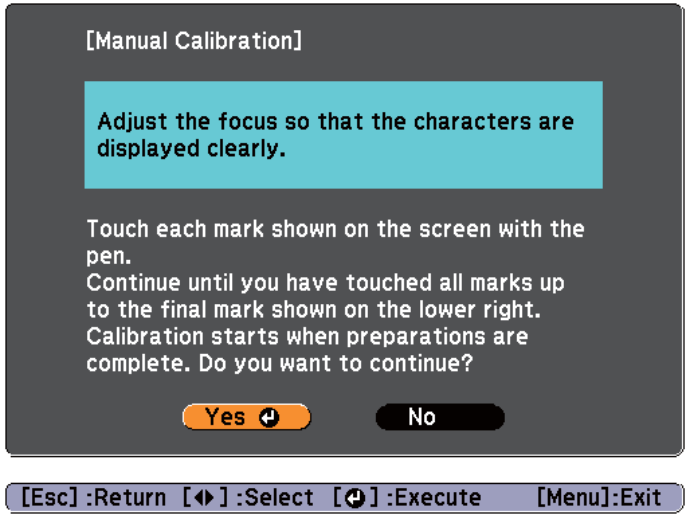
Manual Calibration

This function allows you to manually calibrate the pen.

1 Set **Extended** - **Easy Interactive Function** to **Manual Calibration** from the configuration menu.



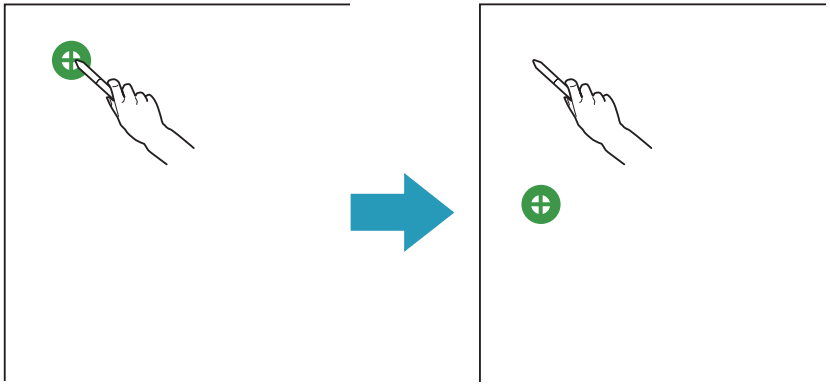
2 Adjust the focus by following the on-screen instructions.


[Manual Calibration]
Adjust the focus so that the characters are displayed clearly.
Touch each mark shown on the screen with the pen.
Continue until you have touched all marks up to the final mark shown on the lower right.
Calibration starts when preparations are complete. Do you want to continue?
Yes
No
[Esc]:Return [◆]:Select [●]:Execute [Menu]:Exit

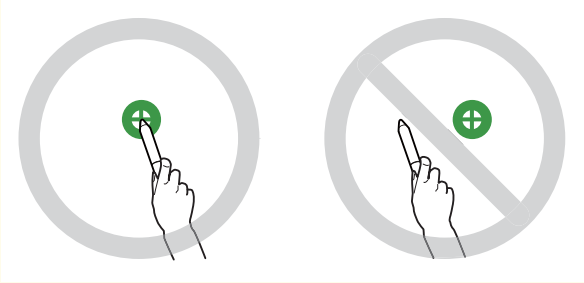
3 Use the [↵] button on the remote control or control panel to select "Yes".

4 A dot is displayed on the projected screen.

Touch the center of the dot with the tip of the Easy Interactive Pen. The dot disappears and then appears at the next position.

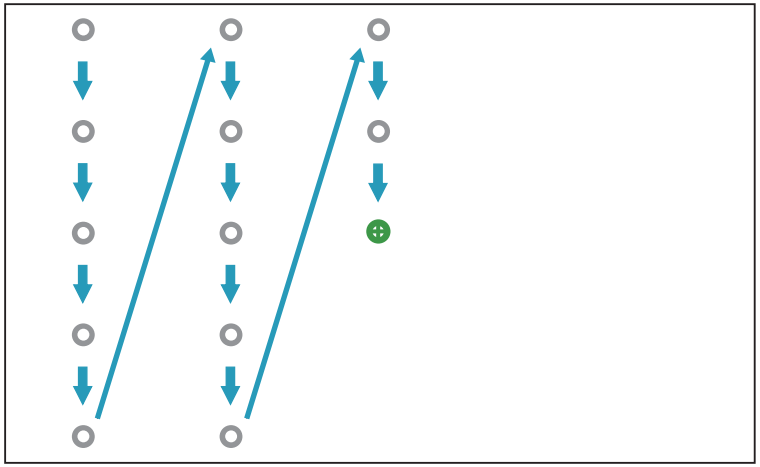


Make sure you touch the center of the dot. Otherwise, it may not be positioned correctly.



5 The dot appears at the top left first and then moves towards the bottom right.

Repeat step 4 until all of the dots disappear.



- If you touch the wrong position, press the [Esc] button on the remote control or control panel to return to the previous dot. You cannot go back further than the previous dot.
- Press and hold the [Esc] button to cancel the calibration.
- It may take several seconds after all of the dots have disappeared until calibration is complete.

When you need to calibrate the pen

The position where you are drawing with the Easy Interactive Pen and where the drawing is displayed may not match in the following situations.

- After performing Keystone correction.
- After adjusting the image size.
- After performing Image Shift.
- After changing the projector's position.

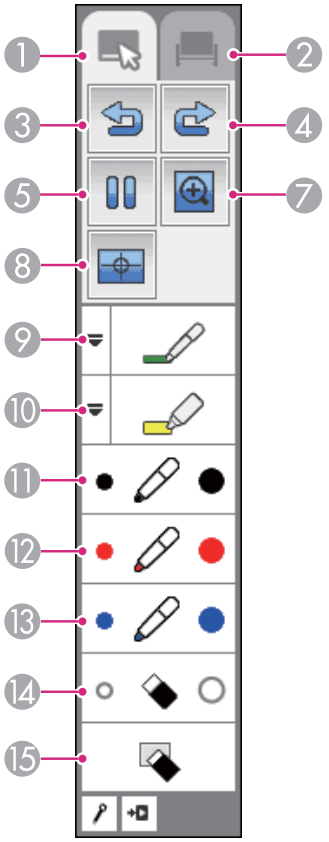
Calibrate the pen again if you notice any discrepancy in positioning.

Toolbar functions

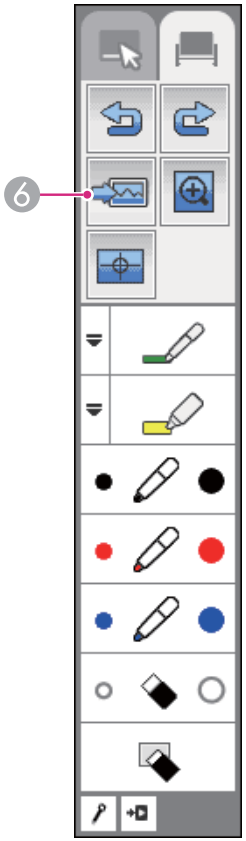
The following toolbar modes are available.

Annotation mode	You can draw lines and shapes on the projected image.
Whiteboard mode	You can project solid color backgrounds such as a whiteboard and write or draw text and pictures. In addition to the plain background, you can also choose other background patterns such as lines and grid lines.

Annotation mode



Whiteboard mode



1

Annotation mode tab

Switches to Annotation mode.

②

Whiteboard mode tab

Switches to Whiteboard mode.

③

Undo

Undoes the previous operation.

④

Redo

Cancels an undo operation and restores the previous status.

⑤

Freeze (Annotation mode only)

Pauses the projected image. Each time you touch the icon, Freeze turns on or off.

You can also use the [Freeze] button on the remote control.

☛ "Freezing the Image (Freeze)" p.67

⑥

Select background (Whiteboard mode only)

Allows you to select a pattern from the six background patterns provided for Whiteboard mode.

⑦

E-Zoom

Displays a target allowing you to enlarge the image at the center of the target. You can move the target with the Easy Interactive Pen.

[ ]: Enlarges the image.

[ ]: Reduces the image.

[ ]: Increases the magnification by one.

[ ]: Quits E-Zoom.

- You can scroll the enlarged image by dragging it with the Easy Interactive Pen.
- You cannot use E-Zoom from the remote control, document camera, or Crestron RoomView® while operating the Easy Interactive Pen in E-Zoom.

☛ "Enlarging Part of the Image (E-Zoom)" p.69

☛ "About Crestron RoomView®" p.90

⑧

Calibrating the pen

Carries out Auto Calibration.

☛ "Auto Calibration" p.59

⑨

Pen

Switches to a pen to draw freely. Click [▼] on the left of the icon to change the color and width of the pen line.

⑩

Highlighter pen

Switches to a highlighter pen that can draw translucent lines. Click [▼] on the left of the icon to change the color and width of the highlighter pen.

⑪

Black pen

Switches to a black pen to draw freely. Click on the right of the icon to draw thick lines, and click on the left of the icon to draw fine lines.

⑫

Red pen

Switches to a red pen to draw freely. Click on the right of the icon to draw thick lines, and click on the left of the icon to draw fine lines.

⓭

Blue pen

Switches to a blue pen to draw freely. Click on the right of the icon to draw thick lines, and click on the left of the icon to draw fine lines.

⓮

Eraser

Switches to an eraser. Click on the right of the icon to erase wider areas, and click on the left of the icon to erase narrower areas.

⓯

Clear screen

Clears everything drawn on the displayed page.

- Click [ ] to hide the toolbar.
- You can display the toolbar again by clicking one of the toolbar tabs [ ] displayed on the left and right of the screen.
- If you click [ ], the toolbar is hidden each time you draw something. By default, the toolbar is always displayed.
- The toolbar tabs [ ] can be moved up and down.
- The toolbar tabs [ ] disappear after a set length of time if they are not used. Put the Easy Interactive Pen close to the projected screen to display the toolbar tabs [ ].

Operating as a mouse and drawing by connecting to a computer (Computer Interactive)

You can connect the projector to a computer to operate the computer from the projected screen and allow two people to draw simultaneously.

You need to install Easy Interactive Driver for Mac OS X.

☛ "Install Easy Interactive Driver (Mac OS X only)" p.64

You need a drawing function already available on your computer.

The Easy Interactive Tools software is supplied with this projector. See the following manual for more information on the Easy Interactive Tools functions.

☛ *Easy Interactive Tools Ver.2 Operation Guide*

- Connect the projector to the computer using a USB cable to link with the computer's functions.
  ☛ "Connecting USB Devices" p.31
- Make the following settings to link with the computer's functions.
  - Set **Extended** - **USB Type B** to **Easy Interactive Function** or **USB Display/Easy Interactive Function** from the configuration menu.
  - Set the source where the computer is connected in **Extended** - **Easy Interactive Function** - **Use Source** from the configuration menu.

  ☛ **Extended** - **Easy Interactive Function** p.103
- You cannot use the projector's built-in drawing function if you switch to the image source set in **Use Source**.

Install Easy Interactive Driver (Mac OS X only)

Easy Interactive Driver is required to use the Easy Interactive Pen with Mac OS X.

System Requirements

OS	Mac OS X 10.3.9 or later Mac OS X 10.4.x Mac OS X 10.5.x Mac OS X 10.6.x Mac OS X 10.7.x

CPU	Power PC G3 900 MHz or faster Recommended: Intel Core Duo 1.5 GHz or faster
Amount of Memory	256 MB or more Recommended: 512 MB or more
Hard Disk Space	100 MB or more
Display	Resolutions no lower than XGA (1024 x 768) and no higher than WUXGA (1920 x 1200) Display color in 16-bit color or greater

Installing

You can skip the following procedure if you installed Easy Interactive Tools using the Easy Install option as this already installs the Easy Interactive Driver.

☛ *Easy Interactive Tools Ver.2 Operation Guide*

1. Turn on your computer.
2. Insert the "EPSON Projector Software for Easy Interactive Function" CD-ROM into your computer.
3. Double-click the Install Navi icon in the EPSON window.
4. Select **Custom Install**, and then follow the on-screen instructions to install.
5. Restart the computer.

Uninstalling

1. Open the **Applications** folder and double-click **Easy Interactive Driver**.
2. Run **Easy Interactive Driver Uninstaller** in the **Tools** folder.
3. Follow the on-screen instructions to uninstall.

Operating the computer with a pen instead of a mouse

You can operate a computer using the Easy Interactive Pen instead of a mouse.

If you set **Enable Right Click** to **On** in **Extended** - **Easy Interactive Function** from the configuration menu, a long press of the Easy Interactive Pen functions as a right click.

Allowing two people to use pens at the same time

Easy Interactive Tools allows two people to use Easy Interactive Pens at the same time.

☛ *Easy Interactive Tools Ver.2 Operation Guide*

Set **Number of Pen Users** to **Two Users** in **Extended** - **Easy Interactive Function** from the configuration menu.

- When **Number of Pen Users** is set to **One User**, you can use the Easy Interactive Pen with tablet PCs in Windows Vista/7. You can also use ink features for Office in Windows Vista/7.
- You can set Easy Interactive Pen operations from the configuration menu.
  - Set **Pen Operation Mode** to **Pen** to enable the pen function in Windows Vista/7.
  - You can swap Right Click and Left Click in **Advanced** - **Pen Tip Button**.

☛ **Extended** - **Easy Interactive Function** p.103

Adjusting the pen operation area

When using the Easy Interactive Function by connecting to a computer, the pen operation area is automatically adjusted if the resolution of the computer changes. You do not need to perform pen alignment again.

You can turn this function On or Off in **Auto Adjust Pen Area** from the configuration menu. The default setting is On.

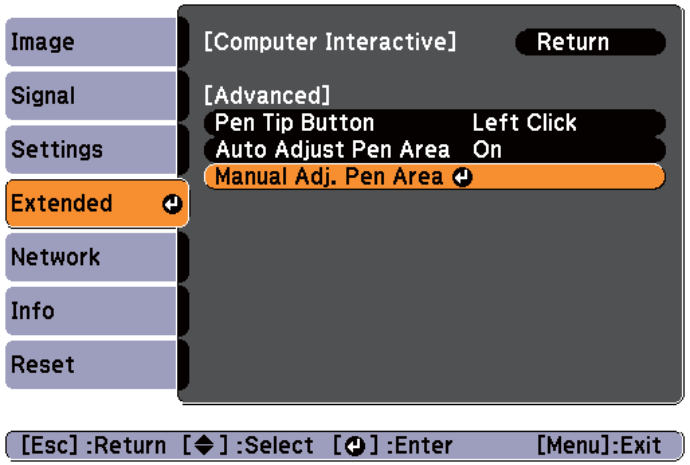
☛ **Extended** - **Easy Interactive Function** - **Advanced** p.103

If you notice the Easy Interactive Pen is out of position even when **Auto Adjust Pen Area** is set to On, you can try Manual Adj. Pen Area.

☛ "Manual Adj. Pen Area" p.66

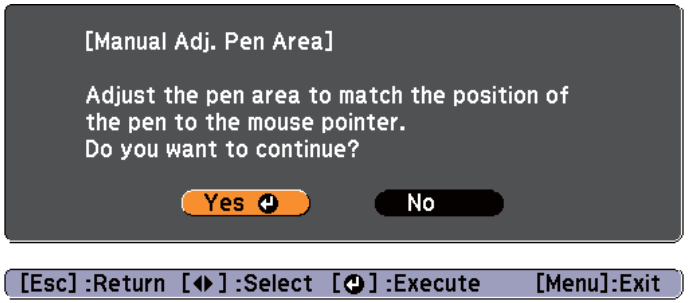
Manual Adj. Pen Area

1 Select **Manual Adj. Pen Area** for **Easy Interactive Function** from the configuration menu.



- Adjust to fit the projected image within the screen.
- Display the computer's desktop screen so that you can check the position of the mouse pointer easily.

2 Use the [↵] button on the remote control to select "Yes".


[Manual Adj. Pen Area]
Adjust the pen area to match the position of the pen to the mouse pointer.
Do you want to continue?
Yes
No
[Esc]:Return [◆]:Select [⏎]:Execute [Menu]:Exit

The mouse pointer moves towards the top left.

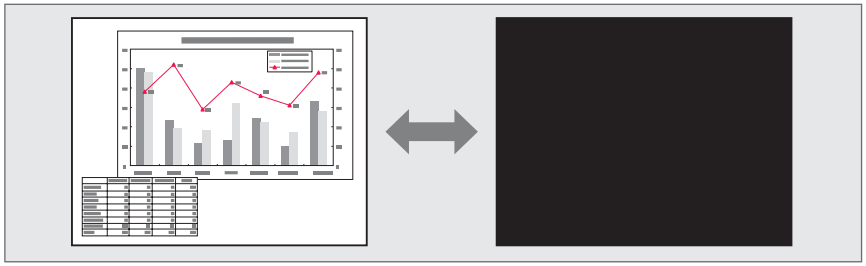
3 When the mouse pointer stops at the top left, touch the tip of the mouse pointer with the Easy Interactive Pen.

The mouse pointer moves towards the bottom right.

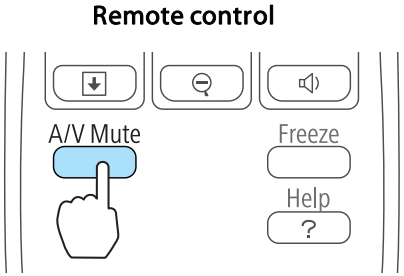
4 When the mouse pointer stops at the bottom right, touch the tip of the mouse pointer with the Easy Interactive Pen.

Hiding the Image and Sound Temporarily (A/V Mute)

You can switch off the image on the screen when you want to focus the audience's attention on what you are saying, or when you do not want to display operations such as changing files.



Each time you press the [A/V Mute] button, A/V Mute turns on or off.

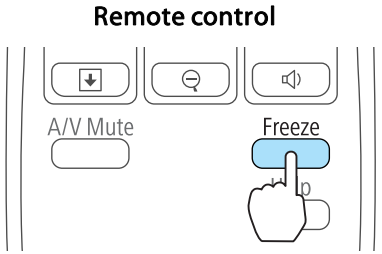


- If you use this function when projecting moving images, the images and sound continue to be played back by the source, and you cannot return to the point where A/V Mute was activated.
- Microphone audio is still output even when A/V Mute is turned on.
- You can select the screen displayed when the [A/V Mute] button is pressed from the Configuration menu.
  ☛ **Extended** - **Display** - **A/V Mute** p.103
- The lamp is still lit during A/V Mute, so the lamp hours continue to accumulate.

Freezing the Image (Freeze)

When Freeze is activated on moving images, the frozen image continues to project on the screen, so you can project a moving image one frame at a time like a still photo. Also, you can perform operations such as changing between files during presentations from a computer without projecting any images if the Freeze function is activated beforehand.

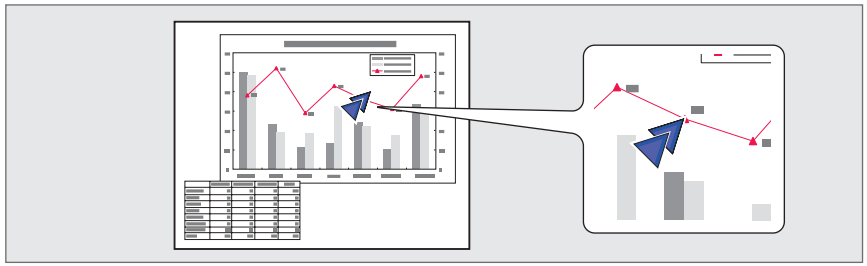
Each time you press the [Freeze] button, Freeze turns on or off.



- Audio does not stop.
- For moving images, the images continue to play back while the screen is frozen, so it is not possible to resume projection from the point where the screen was frozen.
- If the [Freeze] button is pressed while the Configuration menu or the Help screen is displayed, the menu or the Help screen that is displayed is closed.
- Freeze still works while E-Zoom is being used.

Pointer Function (Pointer)

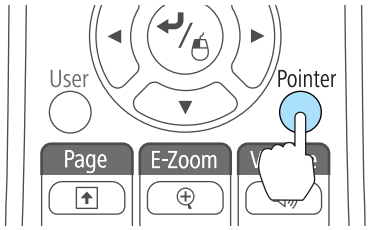
This allows you to move a pointer icon on the projected image, and helps you draw attention to the area you are talking about.



1 Display the Pointer.

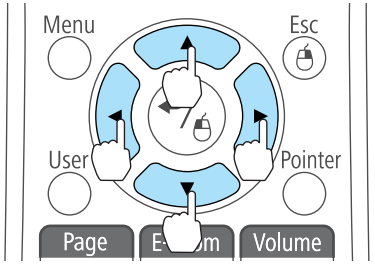
Each time you press the [Pointer] button, the pointer appears or disappears.

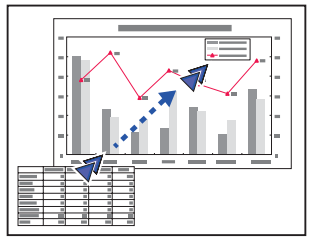
Remote control



2 Move the Pointer icon ( ).

Remote control





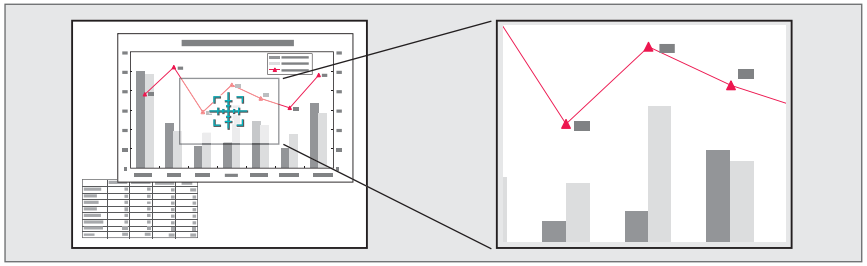
When any pair of adjacent [ ], [ ], [ ], or [ ] buttons are pressed at the same time, the pointer can be moved diagonally.

You can select the shape of the pointer icon from the Configuration menu.

☛ **Settings** - **Pointer Shape** p.101

Enlarging Part of the Image (E-Zoom)

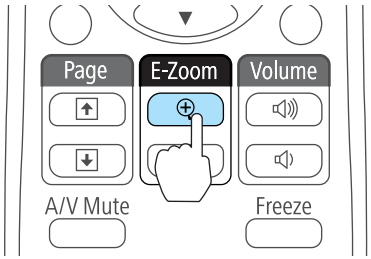
This is useful when you want to expand images to see them in greater detail, such as graphs and tables.



1 Start E-Zoom.

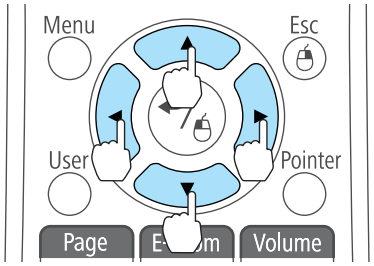
Press the [⊕] button to display the Cross (✛).

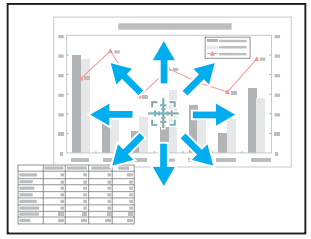
Remote control



2 Move the Cross (✛) to the area of the image that you want to enlarge.

Remote control

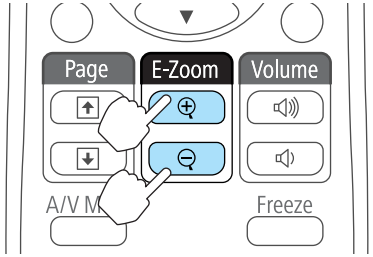




When any pair of adjacent [△], [▽], [◁], or [▷] buttons are pressed at the same time, the pointer can be moved diagonally.

3 Enlarge.

Remote control



[⊕] button: Expands the area each time it is pressed. You can expand quickly by holding the button down.

[⊖] button: Reduces images that have been enlarged.

[Esc] button: Cancels E-Zoom.

- The enlargement ratio appears on the screen. The selected area can be enlarged to between 1 to 4 times in 25 incremental steps.
- During enlarged projection, press the [△], [▽], [◁], and [▷] buttons to scroll the image.

Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)

You can control the computer's mouse pointer from the projector's remote control. This function is called Wireless Mouse.

The following operating systems are compatible with Wireless Mouse.

	Windows	Mac OS X
OS	Windows 98 Windows 98SE Windows Me Windows 2000 Windows XP Windows Vista Windows 7	Mac OS X 10.3.x Mac OS X 10.4.x Mac OS X 10.5.x Mac OS X 10.6.x Mac OS X 10.7.x

* It may not be possible to use the Wireless Mouse function under some versions of the operating systems.

Use the following procedure to enable the Wireless Mouse function.

1 Set **USB Type B** to **Wireless Mouse/USB Display** from the configuration menu. (EB-485Wi/EB-480i/EB-475Wi only)

☛ **Extended** - **USB Type B** p.103

2 Connect the projector to the computer with the supplied or a commercially available USB cable.

☛ "Connecting a Computer" p.26

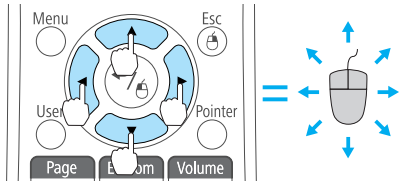
3 Change the source to one of the following.

- USB Display
- Computer1
- Computer2
- HDMI

☛ "Switching to the Target Image Using the Remote Control" p.41

Once set, the mouse pointer can be controlled as follows.

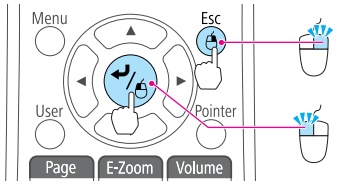
Moving the mouse pointer



[▲][▼][◀][▶] buttons:

Moves the mouse pointer.

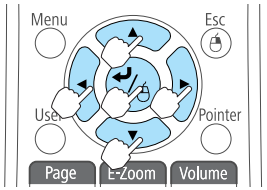
Mouse clicks



[Esc] button: Right click.

[↵] button: Left click. Press quickly twice to double-click.

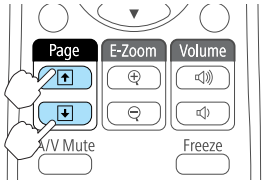
Drag and drop



While holding down the [↵] button, press the [▲], [▼], [◀], or [▶] button to drag.

Release the [↵] button to drop at the desired location.

Page Up/Down



[⇧] button: Moves to the previous page.

[⇩] button: Moves to the next page.

- When any pair of adjacent [▲], [▼], [◀], or [▶] buttons are pressed at the same time, the pointer can be moved diagonally.
- If the mouse button settings are set to reverse on the computer, the operation of the remote control buttons will also be reversed.
- The Wireless Mouse function does not work under the following conditions.
  - When **Extended** - **USB Type B** is set to anything other than **Wireless Mouse/USB Display** (EB-485Wi/EB-480i/EB-475Wi only).
  - When displaying the configuration menu or help.
  - When operating functions other than the Wireless Mouse function (such as adjusting the volume).
    However, when using the E-Zoom or Pointer function, the page up or down function is available.

Saving a User's Logo

You can save the image that is currently being projected as a User's Logo.

You can use the registered user's logo as a display when projection starts or no image signal is being input.

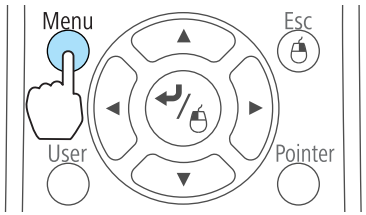
☛ **Extended** - **Display** p.103

Once a User Logo has been saved, the logo cannot be returned to the factory default.

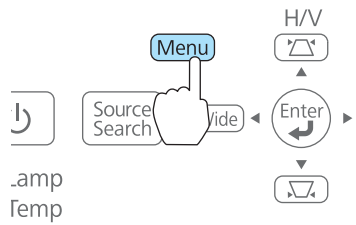
1 Project the image you want to save as the User's Logo, and then press the [Menu] button.

☛ "Using the Configuration Menu" p.95

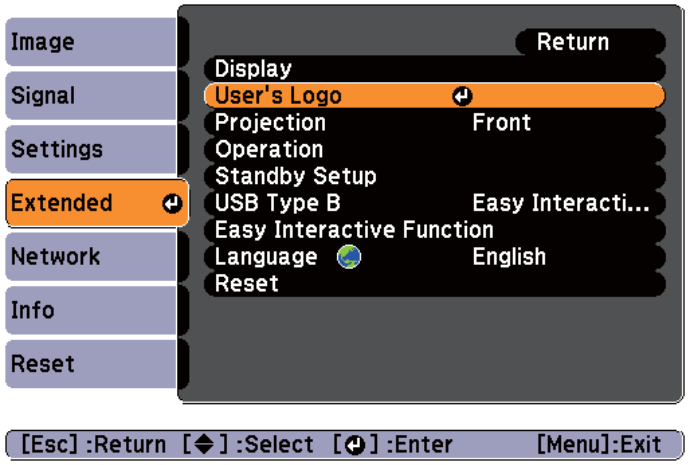
Using Remote Control



Using the Control Panel



2 Select **User's Logo** from **Extended**.



- When **User's Logo Protect** from **Password Protect** is set to **On**, a message is displayed and the User's Logo cannot be changed. You can make changes after setting **User's Logo Protect** to **Off**.

  "Managing Users (Password Protect)" p.80

- If **User's Logo** is selected when Keystone, E-Zoom, Aspect, or Adjust Zoom is being performed, the function currently being performed is cancelled.

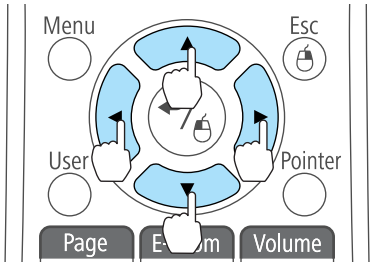
3 When the message "Choose this image as the User's Logo?" is displayed, select **Yes**.

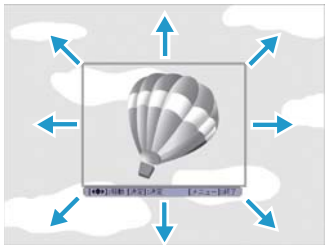
When you press the [↵] button on the remote control or the control panel, the screen size may change depending on the signal to match the actual resolution of the image signal.

4 Move the box to select the part of the image to use as the User's Logo.

You can perform the same operations from the projector's control panel.

Remote control

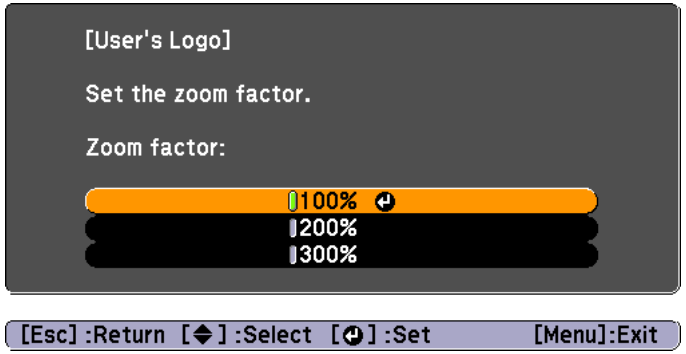




You can save at 400x300 dots in size.

5 When you press the [↵] button and the message "Select this image?" is displayed, select **Yes**.

6 Select the zoom factor from the zoom setting screen.



7 When the message "Save this image as the User's Logo?" is displayed, select **Yes**.

The image is saved. After the image has been saved, the message "Completed." is displayed.

- When a User's Logo is saved, the previous User's Logo is erased.
- It takes a while to save. Do not operate the projector or any connected equipment while it is saving, otherwise malfunctions may occur.

Saving User Pattern

There are four types of patterns registered to the projector, such as ruled lines and grid patterns.

☛ **Settings** - **Pattern** - **Pattern Type** p.101

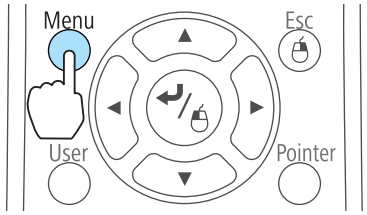
You can also save the image that is currently being projected as a User Pattern.

When a User Pattern is saved, the previous User Pattern is erased.

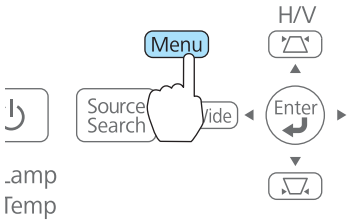
1 Project the image you want to use as the User Pattern, and then press the [Menu] button.

☛ "Using the Configuration Menu" p.95

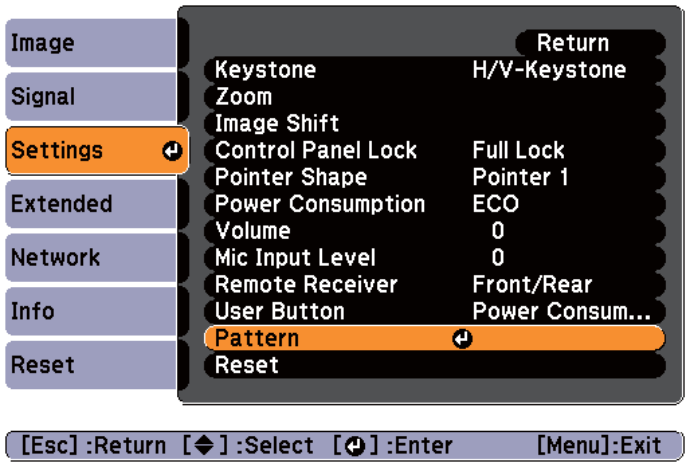
Using Remote Control



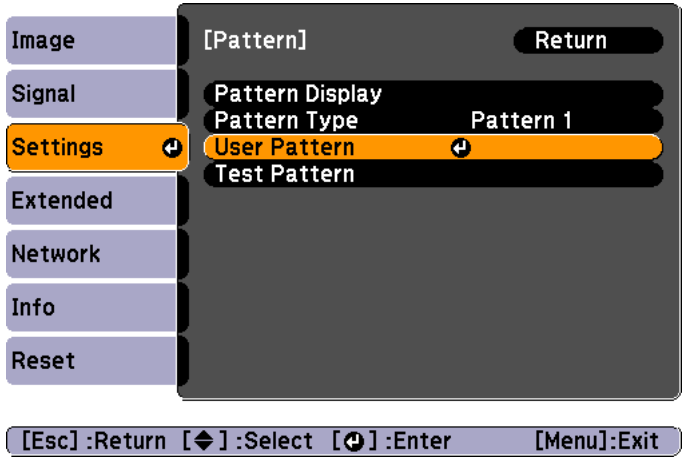
Using the Control Panel



2 Select **Pattern** from **Settings**.



3 Select **User Pattern**.



If **User Pattern** is selected when Keystone, E-Zoom, Aspect, Adjust Zoom, or Image Shift are being performed, the function currently being performed is temporarily canceled.

4 When "Do you want to use the currently projected image as the User Pattern?" is displayed, select **Yes**.

5 When you press the [↵] button, the message "Do you save this image as the User Pattern?" is displayed. Select **Yes**.

The image is saved. After the image has been saved, the message "The User Pattern setting is complete." is displayed.

- Once a User Pattern has been saved, User Pattern cannot be returned to the factory default.
- It takes a while to save a User Pattern. Do not operate the projector or any connected equipment while saving the user pattern, otherwise malfunctions may occur.

Projecting Without a Computer (Slideshow)

By connecting a USB storage device such as a USB memory or a USB hard disk to the projector, you can project the files stored on the device without using a computer. This function is called Slideshow.

- You may not be able to use USB storage devices that incorporate security functions.
- You cannot correct keystone distortion while projecting a Slideshow, even if you press the [⏢] and [⏢] buttons on the control panel.

Specifications for files that can be projected using Slideshow

Type	File Type (Extension)	Notes
Image	.jpg	The following cannot be projected. - CMYK color mode format - Progressive format - Images with a resolution greater than 8192x8192 Due to the characteristics of JPEG files, images may not be projected clearly if the compression ratio is too high.
	.bmp	Cannot project images with a resolution greater than 1280x800.
	.gif	• Cannot project images with a resolution greater than 1280x800. • Cannot project animated GIFs.
	.png	Cannot project images with a resolution greater than 1280x800.

- When connecting and using a USB-compatible hard disk, make sure you connect the AC adaptor supplied with the hard disk.
- The projector does not support some file systems, so use media that has been formatted in Windows.
- Format the media in FAT16/32.

Slideshow examples

Projecting images stored on USB storage

☛ "Projecting the selected image" p.77

☛ "Projecting image files in a folder in sequence (Slideshow)" p.78

Slideshow operating methods

Although the following steps are explained based on the remote control, you can perform the same operations from the control panel.

Starting Slideshow

1 Change the source to USB.

☛ "Switching to the Target Image Using the Remote Control" p.41

2 Connect the USB storage device or digital camera to the projector.

☛ "Connecting USB Devices" p.31

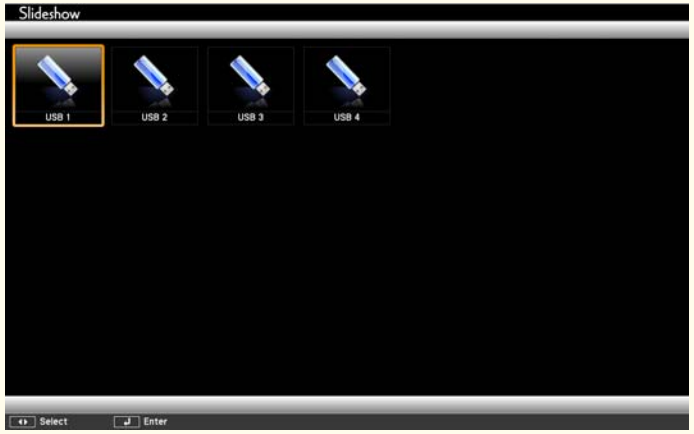
Slideshow starts and the file list screen is displayed.

- JPEG files are displayed as thumbnails (file contents are displayed as small images).
- Other files or folders are displayed as icons as shown in the following table.

Icon	File	Icon	File
	JPEG files*		BMP files
	GIF files		PNG files

* When it cannot be displayed as a thumbnail, it is displayed as an icon.

- You can also insert a memory card into a USB card reader and then connect the reader to the projector. However, some commercially available USB card readers may not be compatible with the projector.
- If the following screen (Select Drive screen) is displayed, use the [▲], [▼], [◀], and [▶] buttons to select the drive you want to use, and then press the [↵] button.



- You can display the Select Drive screen by positioning the cursor on **Select Drive** at the top of the file list screen, and then press the [↵] button.

Projecting images

1 Use the [▲], [▼], [◀], and [▶] buttons to select the file or folder you want to project.

If not all of the files and folders are displayed on the current screen, press the [▼] button on the remote control, or position the cursor on **Next Page** at the bottom of the screen and press the [↵] button.

To return to the previous screen, press the [▲] button on the remote control, or position the cursor on **Previous Page** at the top of the screen and press the [↵] button.

2 Press the [↵] button.

The selected image is displayed.

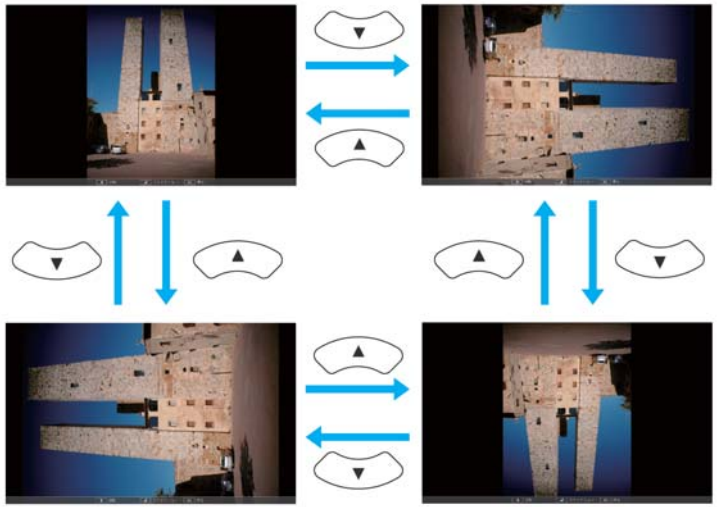
When a folder is selected, the files in the selected folder are displayed. To return to the screen which was displayed before opening the folder, position the cursor on **Back to Top** and press the [↵] button.

Rotating images

You can rotate the played images in 90˚ increments. The rotating function is also available during Slideshow.

1 Play images, or run Slideshow.

2 While projecting, press the [▲] or [▼] button.



Stopping Slideshow

To close Slideshow, disconnect the USB device from the USB port on the projector. For devices such as digital cameras or hard disks, turn off the device and then remove it from the projector.

Projecting the selected image

Attention

Do not disconnect the USB storage device while it is being accessed. Slideshow may not operate correctly.

1 Start Slideshow.

The file list screen is displayed.

☛ "Starting Slideshow" p.75

2 Press the [▲], [▼], [◄], and [►] buttons to select the image file you want to project.

3 Press the [↵] button.

The image is displayed.

Press the [◄][►] buttons to move to the next or previous image file.

4 Press the [Esc] button to return to the file list screen.

Projecting image files in a folder in sequence (Slideshow)

You can project the image files in a folder in sequence, one at a time. This function is called Slideshow. Use the following procedure to run Slideshow.

To change files automatically when you run Slideshow, set **Screen Switching Time** from **Option** in Slideshow to anything other than **No**. The default setting is 3 seconds.

☛ "Image file display settings and Slideshow operation settings" p.78

1 Start Slideshow.

The file list screen is displayed.

☛ "Starting Slideshow" p.75

2 Use the [▲], [▼], [◀], and [▶] buttons to position the cursor on the folder you want to run the Slideshow, and then press the [↵] button.

3 Select **Slideshow** at the bottom of the file list screen, and then press the [↵] button.

Slideshow starts, and the image files in the folder are automatically projected in sequence, one at a time.

When the last file is projected, the file list is displayed again automatically. If you set **Continuous Play** to **On** in the Option screen, projection starts again from the beginning when it reaches the end.

☛ "Image file display settings and Slideshow operation settings" p.78

You can proceed to the next screen, return to the previous screen, or stop playback while projecting a Slideshow.

If **Screen Switching Time** on the Option screen is set to **No**, files do not change automatically when you select Play Slideshow. Press the [▶] button, the [↵] button, or the [⏭] button to continue to the next file.

You can use the following functions when projecting an image file with Slideshow.

- Freeze
  ☛ "Freezing the Image (Freeze)" p.67
- A/V Mute
  ☛ "Hiding the Image and Sound Temporarily (A/V Mute)" p.67
- E-Zoom
  ☛ "Enlarging Part of the Image (E-Zoom)" p.69

Image file display settings and Slideshow operation settings

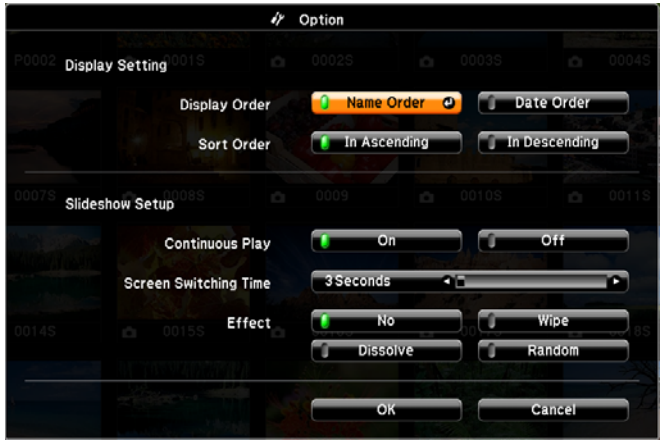
You can set the file display order and Slideshow operations on the Option screen.

1 Press the [▲], [▼], [◀] and [▶] buttons to position the cursor over the folder where you want to set display conditions, and then press the [Esc] button. Select **Option** from the submenu displayed, then press the [↵] button.

2 When the following Option screen is displayed, set each of the items.

Enable the settings by positioning the cursor on the target item and pressing the [↵] button.

The following table shows the details for each item.



Display Order	You can select to display the files in **Name Order** or **Date Order**.
Sort Order	You can select to sort the files **In Ascending** or **In Descending** order.
Continuous Play	You can set whether to repeat the Slideshow.
Screen Switching Time	You can set the time for a single file to be displayed in Play Slideshow. You can set a time between **No** (0) to 60 Seconds. When you set **No**, auto play is disabled.
Effect	You can set the screen effects when changing slides.

3 Use the [▲], [▼], [◄], and [►] buttons to position the cursor over **OK**, and then press the [↵] button.

The settings are applied.

If you do not want to apply the settings, position the cursor on **Cancel**, and then press the [↵] button.

The projector has the following enhanced security functions.

- Password Protect
  You can limit who can use the projector.
- Control Panel Lock
  You can prevent people changing the settings on the projector without permission.
  ☛ "Restricting Operation (Control Panel Lock)" p.82
- Anti-Theft Lock
  The projector is equipped with the following anti-theft security device.
  ☛ "Anti-Theft Lock" p.83

Managing Users (Password Protect)

When Password Protect is activated, people who do not know the password cannot use the projector to project images even if the projector power is on. Furthermore, the user's logo that is displayed when you turn on the projector cannot be changed. This acts as an anti-theft device as the projector cannot be used even if it is stolen. At the time of purchase, Password Protect is not activated.

Kinds of Password Protect

The following three kinds of Password Protect settings can be made according to how the projector is being used.

- **Power On Protect**
  When **Power On Protect** is **On**, you need to enter a preset password after the projector is plugged in and turned on (this also applies to Direct Power On). If the correct password is not entered, projection does not start.
- **User's Logo Protect**
  Even if someone tries to change the User's Logo set by the owner of the projector, it cannot be changed. When **User's Logo Protect** is set to **On**, the following setting changes for the User's Logo are prohibited.
  - Capturing a User's Logo
  - Setting **Display Background**, **Startup Screen**, or **A/V Mute** from **Display**
    ☛ **Extended** - **Display** p.103
- **Network Protect**
  When **Network Protect** is set to **On**, changing the settings for **Network** is prohibited.
  ☛ "Network Menu" p.105

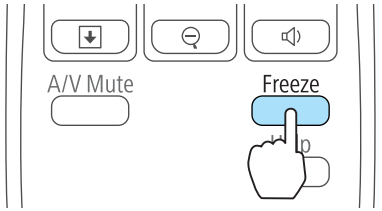
Setting Password Protect

Use the following procedure to set Password Protect.

1. During projection, hold down the [Freeze] button for about five seconds.

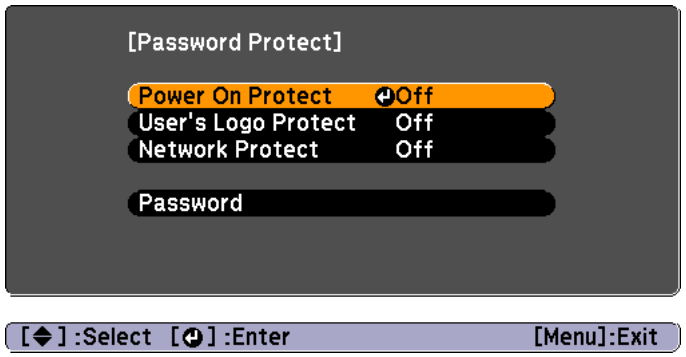
   The Password Protect setting menu is displayed.

Remote control



- If Password Protect is already activated, you must enter the password.
  If the password is entered correctly, the Password Protect setting menu is displayed.
  ☛ "Entering the Password" p.81
- When the password is set, stick the supplied password protect sticker in a visible position on the projector as a further theft deterrent.

2 Select the type of Password Protect you want to set, and then press the [↵] button.



3 Select **On**, and then press the [↵] button.

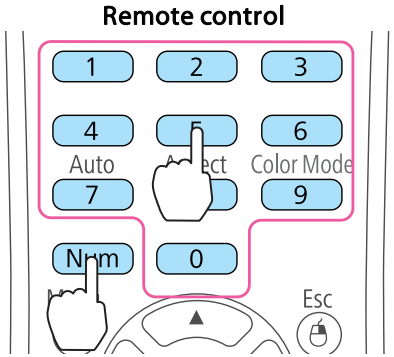
Press the [Esc] button, the screen displayed in step 2 is displayed again.

4 Set the password.

(1) Select **Password**, and then press the [↵] button.

(2) When the message "Change the password?" is displayed, select **Yes** and then press the [↵] button. The default password is set to "0000". Change this to your own desired Password. If you select **No**, the screen displayed in step 2 is displayed again.

(3) While holding down the [Num] button, enter a four digit number using the numeric buttons. The number entered is displayed as "* * * *". When you enter the fourth digit, the confirmation screen is displayed.

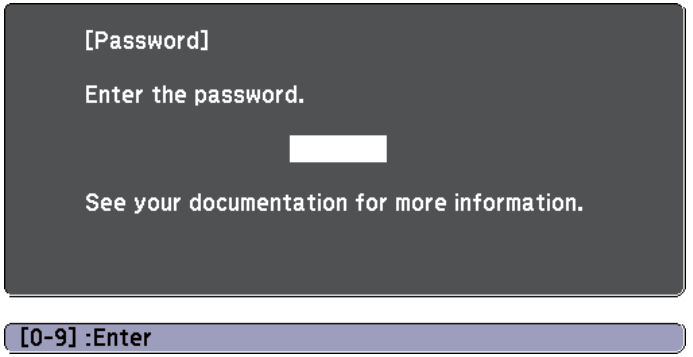


(4) Re-enter the password.
The message "Password accepted." is displayed.
If you enter the password incorrectly, a message is displayed prompting you to re-enter the password.

Entering the Password

When the password entry screen is displayed, enter the password using the remote control.

While holding down the [Num] button, enter the password by pressing the numeric buttons.



When you enter the correct password, Password Protect is temporarily released.

Attention

- If an incorrect password is entered three times in succession, the message "The projector's operation will be locked." is displayed for approximately five minutes, and then the projector switches to standby mode. If this happens, disconnect the power plug from the electrical outlet and then reinsert it and turn the projector's power back on. The projector displays the password entry screen again so that you can enter the correct password.
- If you have forgotten the password, make a note of the "**Request Code**: xxxxx" number that appears on the screen and contact the nearest address provided in the Epson Projector Contact List.

  ☛ *Epson Projector Contact List*
- If you continue to repeat the above operation and input the wrong Password 30 times in succession, the following message is displayed and the projector does not accept any more Password entries. "The projector's operation will be locked. Contact Epson as described in your documentation."

  ☛ *Epson Projector Contact List*

Restricting Operation (Control Panel Lock)

Do one of the following to lock the operation buttons on the control panel.

- Full Lock

  All of the buttons on the control panel are locked. You cannot perform any operations from the control panel, including turning the power on or off.
- Partial Lock

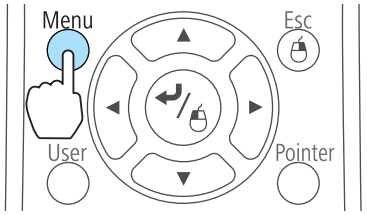
  All of the buttons on the control panel, except for the [⏻] button, are locked.

This is useful at events or shows when you want to deactivate all buttons during projection or at schools when you want to limit button operation. The projector can still be operated using the remote control.

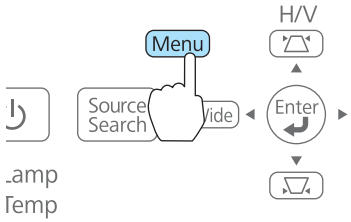
1 Press the [Menu] button while projecting.

☛ "Using the Configuration Menu" p.95

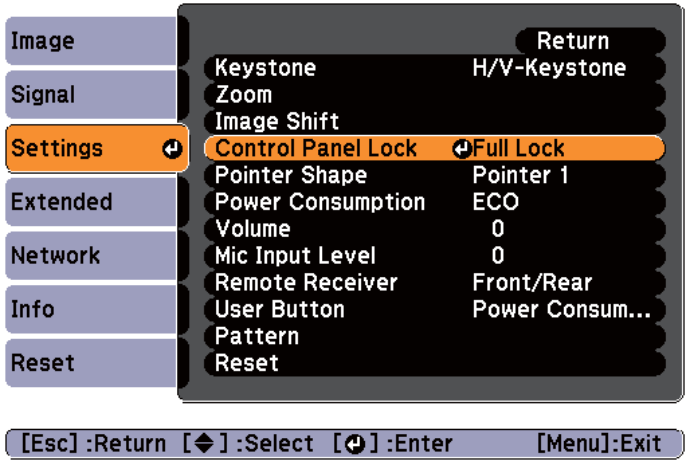
Using Remote Control



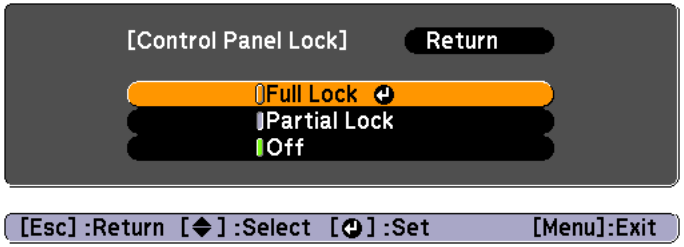
Using the Control Panel



2 Select **Control Panel Lock** from **Settings**.



3 Select either **Full Lock** or **Partial Lock** according to your purpose.



4 Select **Yes** when the confirmation message is displayed.

The control panel buttons are locked according to the setting you chose.

You can release the control panel lock by one of the following two methods.

- Select **Off** from **Control Panel Lock**.
  ☛ **Settings** - **Control Panel Lock** p.101
- Press and hold down the [↵] button on the control panel for about seven seconds, a message is displayed and the lock is released.

Anti-Theft Lock

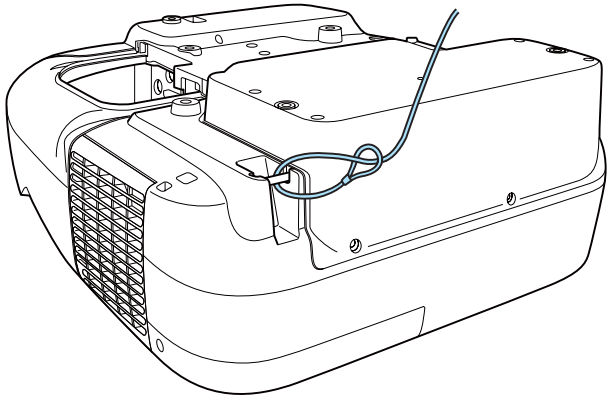
The projector is equipped with the following types of anti-theft security devices.

- Security slot
  The security slot is compatible with the Microsaver Security System manufactured by Kensington.
  See the following for more details on the Microsaver Security System.
  ☛ http://www.kensington.com/
- Security cable installation point
  A commercially available theft-prevention wire lock can be passed through the installation point to secure the projector to a desk or pillar.

Installing the wire lock

Pass an anti-theft wire lock through the installation point.

See the documentation supplied with the wire lock for locking instructions.



About EasyMP Monitor

EasyMP Monitor lets you carry out operations such as checking the status of multiple Epson projectors that are connected to a network at a computer monitor, and controlling the projectors from the computer.

You can download EasyMP Monitor from the following Web site.

http://www.epson.com

The following provides brief descriptions of the monitoring and control functions that can be carried out using EasyMP Monitor.

- **Registering projectors for monitoring and control**
  Projectors on the network can be searched for automatically, and you can then select which projectors you want to register from the projectors that are detected.
  You can register target projectors by entering their IP addresses.
- **Registered projectors can also be assigned to groups so that they can be monitored and controlled in groups.**
- **Monitoring the status of registered projectors**
  You can check the power status (ON/OFF) for projectors and problems or warnings that require attention by using the icons.
  You can select groups of projectors or a single projector and then check the cumulative lamp operating time or information such as input sources, problems, and warnings for the projectors.
- **Controlling registered projectors**
  Projectors can be selected in groups or as single projectors, and you can then carry out operations for the selected projectors such as turning the power on and off and switching their input sources.
  You can use Web Control functions to change the settings in the projector's configuration menu.
  If there are certain control actions which are carried out regularly at particular times or on particular days, you can use Timer Settings to register timer settings.
- **Mail Notification settings**
  You can set e-mail addresses to which notifications are sent if a status that requires attention, such as a problem, occurs with a registered projector.
- **Sending messages to registered projectors**
  You can use the Message Broadcasting plugin for EasyMP Monitor to send JPEG files to registered projectors.
  Download the Message Broadcasting plugin from the Web site address provided at the beginning of this chapter.

Changing Settings Using a Web Browser (Web Control)

By using the Web browser of a computer connected to the projector on a network, you can set the projector's functions and control the projector. This function allows you to perform setup and control operations remotely. In addition, since you can use the computer's keyboard, entering characters required for the setup is easier.

Use Microsoft Internet Explorer 6.0 or later as the Web browser. Use Safari for Mac OS X.

If you set **Standby Mode** to **Communication On**, you can use a Web browser to make settings and perform control even if the projector is in standby mode (when the power is off).

☛ **Extended** - **Standby Setup** - **Standby Mode** p.103

Projector setup

In a Web browser, you can set items that are usually set in the projector's Configuration menu. The settings are reflected in the Configuration menu. There are also items that can only be set in a Web browser.

Items in the Configuration menu that cannot be set by a Web browser

- Settings menu - Keystone - Quick Corner
- Settings menu - Image Shift
- Settings menu - Pointer Shape
- Settings menu - Pattern (except Pattern Type)
- Settings menu - User Button
- Extended menu - User's Logo
- Extended menu - USB Type B
- Extended menu - Easy Interactive Function
- Extended menu - Language
- Extended menu - Operation - High Altitude Mode
- Reset menu - Reset All and Reset Lamp Hours

The settings for items on each menu are the same as the projector's Configuration menu.

☛ "Configuration Menu" p.94

Items that can only be set with a Web browser

- SNMP Community Name
- Monitor Password

Displaying the Web Control screen

Use the following procedure to display the Web Control screen.

Make sure the computer and projector are connected to the network. Use Advanced when connecting via a Wireless LAN.

If your Web browser is set up to connect via a proxy server, the Web Control screen cannot be displayed. To display Web Control, you need to make settings so that a proxy server is not used for a connection.

1. Start a Web browser on the computer.
2. Enter the IP address of the projector in the address input box of the Web browser, and press the Enter key on the computer's keyboard.
3. The user ID and password entry screen is displayed.

   Enter "**EPSONWEB**" as the user ID.

   The default password is "**admin**".

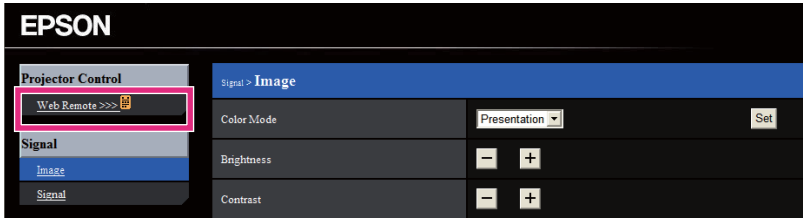
- Enter the user ID even if the password setting is disabled. The user ID cannot be changed.
- You can change the password from **Basic** - **Web Control Password** in the Network menu under the Configuration menu.

☛ "Basic menu" p.107

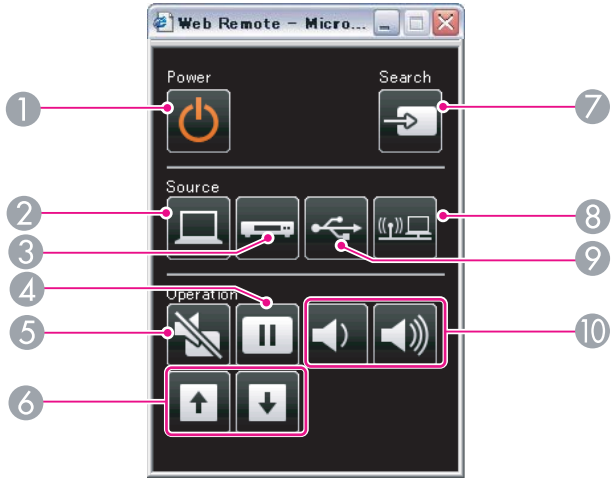
Displaying the Web Remote screen

The Web Remote function allows you to perform projector remote control operations with a Web browser.

1. Display the Web Control screen.
2. Click **Web Remote**.



3. The Web Remote screen is displayed.



	Name	Function
1	[⏻] button	Turns the projector power on or off. ☛ "From Installation to Projection" p.39
2	[Computer] button	Each time the button is pressed, it cycles through the following images: • Computer1 port • Computer2 port
3	[Video] button	Each time the button is pressed, it cycles through the following images: • S-Video port • Video port • HDMI port
4	[Freeze] button	Pauses or resumes image playback. ☛ "Freezing the Image (Freeze)" p.67
5	[A/V Mute] button	Turns the video and audio on or off. ☛ "Hiding the Image and Sound Temporarily (A/V Mute)" p.67
6	[Page] buttons [Up] [Down]	Changes pages in files such as PowerPoint files when using the following projection methods. • When using the Wireless Mouse function ☛ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.70 • When using USB Display ☛ "Projecting with USB Display" p.41 • When connecting to a network When projecting images using Slideshow, pressing these buttons displays the previous/next image file.
7	[Source Search] button	Switches to the image from the input port where video signals are being input. ☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40
8	[LAN] button	Changes to the images projected with EasyMP Network Projection. When projecting using the optional Quick Wireless Connection USB Key, this button switches to that image. ☛ "Switching to the Target Image Using the Remote Control" p.41
9	[USB] button	Each time the button is pressed, it cycles through the following images: • USB Display • Images from the device connected to the USB-A port ☛ "Switching to the Target Image Using the Remote Control" p.41
10	[Volume] buttons [🔉][🔊]	[🔉] Decreases the volume. [🔊] Increases the volume. ☛ "Adjusting the Volume" p.50

Using the Mail Notification Function to Report Problems

When you set Mail Notification, notification messages are sent to the preset email addresses when a problem or warning occurs with a projector. This will enable the operator to be notified of problems with projectors even at locations away from the projectors.

☛ **Network** - **Mail** - **Mail Notification** p.111

- Up to a maximum of three notification destinations (addresses) can be registered, and notification messages can be sent to all three destinations at once.
- If a projector develops a critical problem and suddenly stops working, it may not be able to send a message notifying an operator of the problem.
- Controlling is possible if **Standby Mode** is set to **Communication On**, even if the projector is in standby state (when the power is off).

  ☛ **Extended** - **Standby Setup** - **Standby Mode** p.103

Reading Error Notification Mail

When the Mail Notification function is set to On and a problem or warning occurs in the projector, the following email will be sent.

Sender: Email Address 1

Subject: EPSON Projector

Line 1: The name of the projector where the problem occurred

Line 2: The IP address set for the projector where the problem has occurred.

Line 3 and on: Details of the problem

The details of the problem are listed line by line. The main message contents are listed below.

- Internal error
- Fan related error
- Sensor error
- Lamp timer failure
- Lamp out
- Internal temperature error
- High-speed cooling in progress
- Lamp replacement notification
- No-signal
  No Signal is input to the projector. Check the connection status or check that the power for the signal source is turned on.
- Auto Iris Error
- Power Err. (Ballast)
- Obstacle Detection Error

See the following to deal with problems or warnings.

☛ "Reading the Indicators" p.118

Management Using SNMP

By setting **SNMP** to **On** in the Configuration menu, notification messages are sent to the specified computer when a problem or warning occurs. This will enable the operator to be notified of problems with projectors even at locations away from the projectors.

☛ **Network** - **Others** - **SNMP** p.113

- SNMP should be managed by a network administrator or someone who is familiar with the network.
- To use the SNMP function to monitor the projector, you need to install the SNMP manager program on your computer.
- The managing function using SNMP cannot be used via wireless LAN in Quick connection mode.
- Up to two destination IP addresses can be saved.

ESC/VP21 Commands

You can control the projector from an external device using ESC/VP21.

Command list

When the power ON command is transmitted to the projector, the power turns on and it enters warm-up mode. When the projector's power has turned on, a colon ":" (3Ah) is returned.

When a command is input, the projector executes the command and returns a ":", and then accepts the next command.

If the command being processed terminates abnormally, an error message is output and a ":" is returned.

The main contents are listed below.

Item			Command
Power ON/OFF	On		PWR ON
	Off		PWR OFF
Signal selection	Computer1	Auto	SOURCE 1F
		RGB	SOURCE 11
		Component	SOURCE 14
	Computer2	Auto	SOURCE 2F
		RGB	SOURCE 21
		Component	SOURCE 24
	HDMI		SOURCE 30
	Video		SOURCE 41
	S-Video		SOURCE 42
	USB Display		SOURCE 51
	USB		SOURCE 52
	LAN		SOURCE 53
A/V Mute ON/OFF	On		MUTE ON
	Off		MUTE OFF

Add a Carriage Return (CR) code (0Dh) to the end of each command and transmit.

For more details, contact your local dealer or the nearest address provided in the Epson Projector Contact List.

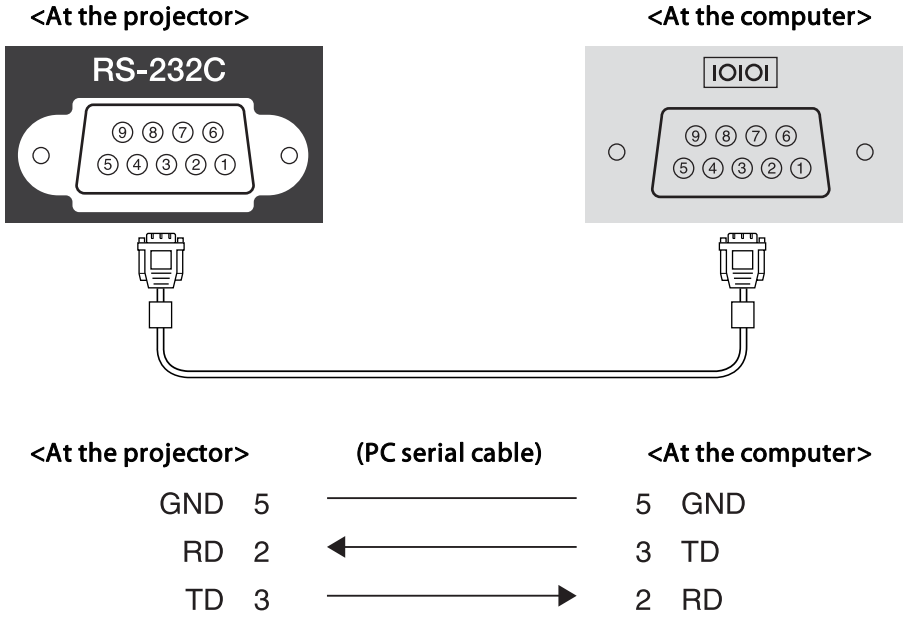
☛ *Epson Projector Contact List*

Cable layouts

Serial connection

- Connector shape: D-Sub 9-pin (male)

• Projector input port name: RS-232C



Signal Name	Function
GND	Signal wire ground
TD	Transmit data
RD	Receive data

Communications protocol

- Default baud rate setting: 9600 bps
- Data length: 8 bit
- Parity: None
- Stop-bit: 1 bit
- Flow control: None

About PJLink

PJLink Class1 was established by the JBMIA (Japan Business Machine and Information System Industries Association) as a standard protocol for controlling network-compatible projector's as part of their efforts to standardize projector control protocols.

The projector complies with the PJLink Class1 standard established by the JBMIA.

You need to make network settings before you can use PJLink. See the following for more information on network settings.

☛ "Network Menu" p.105

It complies with all commands except for the following commands defined by PJLink Class1, and agreement was confirmed by the PJLink standard adaptability verification.

URL:http://pjlink.jbmia.or.jp/english/

• **Non-compatible commands**

Function		PJLink Command
Mute settings	Image muting set	AVMT 11
	Audio muting set	AVMT 21

• **Input names defined by PJLink and corresponding projector sources**

Source	PJLink Command
Computer1	INPT 11
Computer2	INPT 12
Video	INPT 21
S-Video	INPT 22
HDMI	INPT 32
USB	INPT 41

Source	PJLink Command
LAN	INPT 52
USB Display	INPT 53

- Manufacturer name displayed for "Manufacture name information query"
  EPSON

- Model name displayed for "Product name information query"
  EB-485Wi/EB-485WT/EB-CU610Wi/BrightLink 485Wi
  EB-485W/EB-CU610W/PowerLite 485W
  EB-480i/EB-480T/EB-CU610Xi/BrightLink 480i
  EB-480/EB-CU610X/PowerLite 480
  EB-475Wi/EB-475WT/EB-CU600Wi/BrightLink 475Wi
  EB-475W/EB-CU600W/PowerLite 475W
  EB-470/EB-CU600X/PowerLite 470

About Crestron RoomView®

Crestron RoomView® is an integrated control system provided by Crestron®. It can be used to monitor and control multiple devices connected on a network.

The projector supports the control protocol, and can therefore be used in a system built with Crestron RoomView®.

Visit the Crestron® Web site for details on Crestron RoomView®. (Only English-language displays are supported.)

http://www.crestron.com

The following provides an overview of Crestron RoomView®.

- **Remote operation using a Web browser**
  You can operate a projector from your computer just like using a remote control.

- **Monitoring and control with application software**
  You can use Crestron RoomView® Express or Crestron RoomView® Server Edition provided by Crestron® to monitor devices in the system, to communicate with the help desk, and to send emergency messages. See the following Web site for details.
  http://www.crestron.com/getroomview

This manual describes how to perform operations on your computer using a Web browser.

- You can only enter single-byte alphanumeric characters and symbols.
- The following functions cannot be used while using Crestron RoomView®.
  ☛ "Changing Settings Using a Web Browser (Web Control)" p.84
  Message Broadcasting (EasyMP Monitor plug-in)
- Controlling is possible if **Standby Mode** is set to **Communication On**, even if the projector is in standby state (when the power is off).
  ☛ **Extended** - **Standby Setup** - **Standby Mode** p.103

Operating a projector from your computer

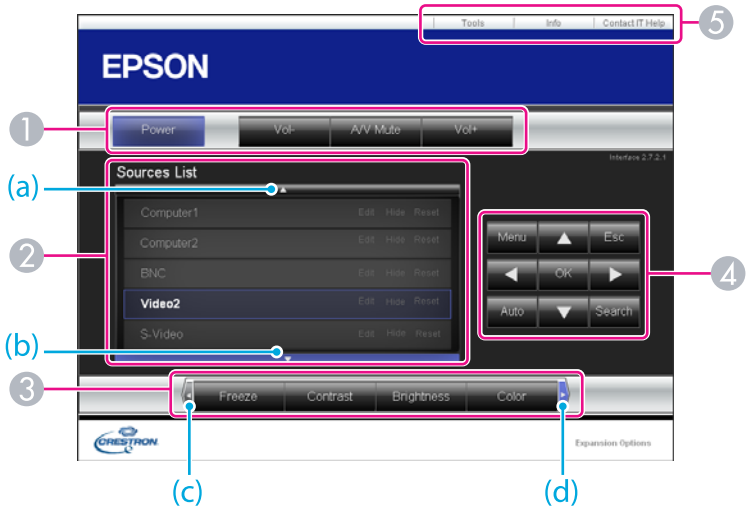
Displaying the operation window

Check the following before carrying out any operations.

- Make sure the computer and projector are connected to the network. When communicating with a wireless LAN, connect in Advanced connection mode.
  ☛ "Wireless LAN menu" p.108
- Set **Crestron RoomView** to **On** from the **Network** menu.
  ☛ **Network** - **Others** - **Crestron RoomView** p.113

1. Start a Web browser on the computer.
2. Enter the IP address of the projector in the address field of the Web browser, and press the Enter key on the keyboard.
   The operation window is displayed.

Using the operation window



1 You can perform the following operations when you click the buttons.

Button	Function
Power	Turns the projector power on or off.
Vol-/Vol+	Adjusts the volume.
A/V Mute	Turns the video and audio on or off. ☛ "Hiding the Image and Sound Temporarily (A/V Mute)" p.67

2 Switch to the image from the selected input source. To display input sources that are not shown on the screen, click (a) or (b) to scroll up or down. The current video signal input source is displayed in blue.
You can change the source name if necessary.

3 You can perform the following operations when you click the buttons. To display buttons that are not shown on the screen, click (c) or (d) to scroll left or right.

Button	Function
Freeze	Pauses or resumes image playback. ☛ "Freezing the Image (Freeze)" p.67
Contrast	You can adjust the difference between light and dark in the images.
Brightness	You can adjust the image brightness.
Color	You can adjust the color saturation for the images.
Sharpness	You can adjust the image sharpness.
Zoom	Click the [⊕] button to enlarge the image without changing the projection size. Click the [⊖] button to reduce an image that was enlarged with the [⊕] button. Click the [▲], [▼], [◀], or [▶] button to change the position of an enlarged image. ☛ "Enlarging Part of the Image (E-Zoom)" p.69

4 [▲], [▼], [◀], and [▶] buttons have the same effects as [ ], [ ], [ ], and [ ] buttons on the remote control respectively. You can perform the following operations when you click the other buttons.

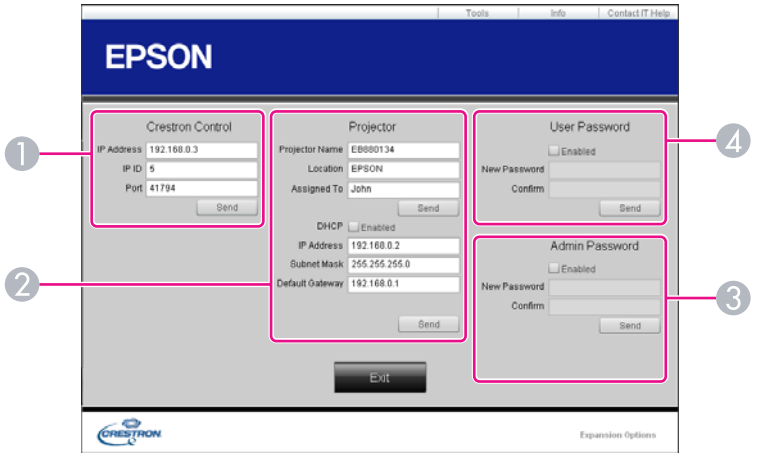
Button	Function
OK	Performs the same operation as the [↵] button on the remote control. ☛ "Remote Control" p.16
Menu	Displays and closes the Configuration menu.
Auto	If clicked while projecting analog RGB signals from Computer1 port or Computer2 port, automatically optimizes the image by adjusting the Tracking, Sync., and Position.
Search	Switches to the image from the input port where video signals are being input. ☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40
Esc	Performs the same operation as the [Esc] button on the remote control. ☛ "Remote Control" p.16

5 You can perform the following operations when you click the tabs.

Tab	Function
Contact IT Help	Displays the Help Desk window. Used to send messages to, and receive messages from, the administrator using Crestron RoomView® Express.
Info	Displays information on the projector that is currently connected.
Tools	Changes settings in the projector that is currently connected. See the next section.

Using the tools window

The following window is displayed when you click the **Tools** tab on the operation window. You can use this window to change settings in the projector that is currently connected.



1 **Crestron Control**
Make settings for Crestron® central controllers.

2 **Projector**
The following items can be set.

Item	Function
Projector Name	Enter a name to differentiate the projector that is currently connected from other projectors on the network. (The name can contain up to 15 single-byte alphanumeric characters.)
Location	Enter an installation location name for the projector that is currently connected on the network. (The name can contain up to 32 single-byte alphanumeric characters and symbols.)
Assigned To	Enter a user name for the projector. (The name can contain up to 32 single-byte alphanumeric characters and symbols.)

Item	Function
DHCP	Select the **Enabled** check box to use DHCP. You cannot enter an IP address if DHCP is enabled.
IP Address	Enter the IP address to assign to the currently connected projector.
Subnet Mask	Enter a subnet mask for the currently connected projector.
Default Gateway	Enter the gateway address for the currently connected projector.
Send	Click this button to confirm the changes made to the **Projector**.

③ **Admin Password**
Select the **Enabled** check box to require a password to open the Tools window.
The following items can be set.

Item	Function
New Password	Enter the new password when changing the password to open the Tools window. (The name can contain up to 26 single-byte alphanumeric characters.)
Confirm	Enter the same password as you entered in **New Password**. If the passwords are not the same, an error is displayed.
Send	Click this button to confirm the changes made to the **Admin Password**.

④ **User Password**
Select the **Enabled** check box to require a password to open the operation window on the computer.
The following items can be set.

Item	Function
New Password	Enter the new password when changing the password to open the operation window. (Up to 26 single-byte alphanumerical characters)
Confirm	Enter the same password as you entered in **New Password**. If the passwords are not the same, an error is displayed.
Send	Click this button to confirm the changes made to the **User Password**.

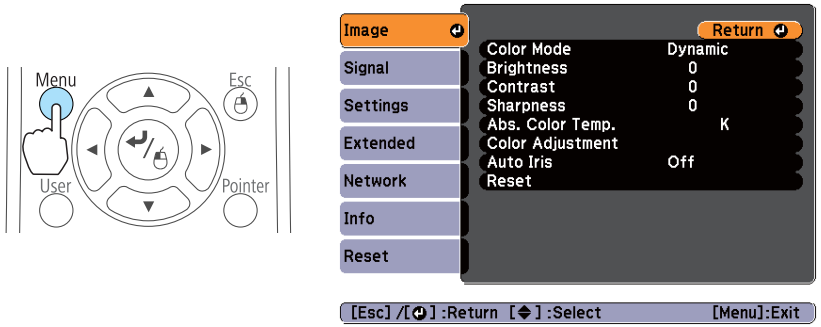
Configuration Menu

This chapter explains how to use the Configuration menu and its functions.

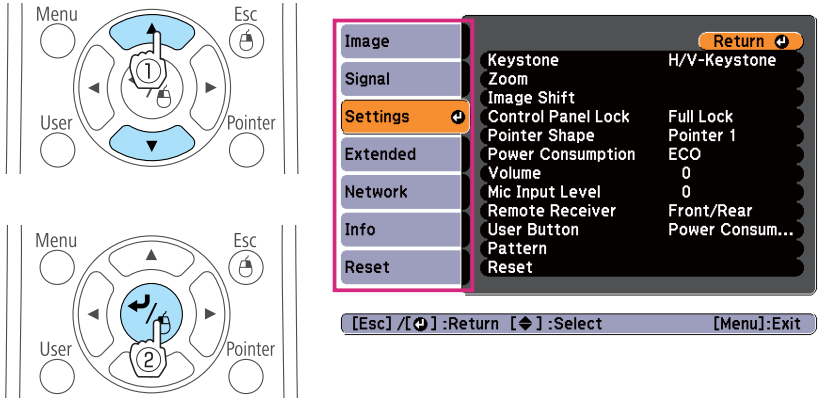
This section explains how to use the Configuration menu.

Although steps are explained using the remote control as an example, you can perform the same operations from the control panel. Check the guide under the menu for the available buttons and their operations.

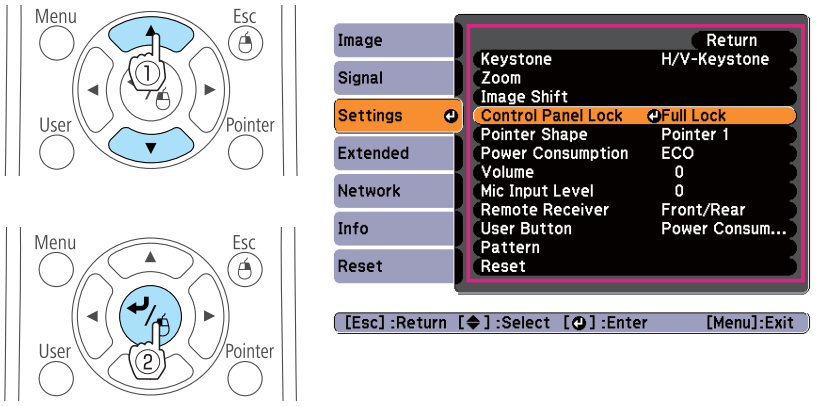
1 Display the Configuration menu screen.



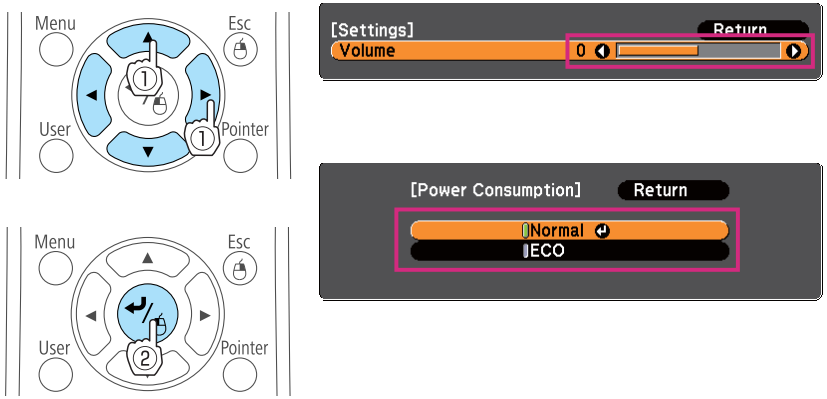
2 Select a top menu item.



3 Select a submenu item.



4 Change settings.



5 Press the [Menu] button to finish making settings.

Configuration Menu Table

Settable items vary depending on the model being used and the image signal and source being projected.

Top Menu Name	Submenu Name	Items or Setting Values
Image menu ☛ p.98	Color Mode	Dynamic, Presentation, Theatre, Photo, Sports, sRGB, Blackboard, and Whiteboard
	Brightness	-24 to 24
	Contrast	-24 to 24
	Color Saturation	-32 to 32
	Tint	-32 to 32
	Sharpness	-5 to 5
	Abs. Color Temp.	5000K to 10000K
	Color Adjustment	Red: -16 to 16 Green: -16 to 16 Blue: -16 to 16
	Auto Iris	On and Off
Signal menu ☛ p.99	Auto Setup	On and Off
	Resolution	Auto, Wide, and Normal
	Tracking	-
	Sync.	-
	Position	Up, Down, Left, and Right
	Progressive	Off, Video, and Film/Auto
	Noise Reduction	Off, NR1, and NR2
	HDMI Video Range	Auto, Normal, and Expanded
	Input Signal	Auto, RGB, and Component
	Video Signal	Auto, NTSC, NTSC4.43, PAL, M-PAL, N-PAL, PAL60, and SECAM
	Aspect	Normal, Auto, 4:3, 16:9, Full, Zoom, and Native
	Overscan	Auto, Off, 4%, and 8%
Settings menu ☛ p.101	Keystone	H/V-Keystone and Quick Corner
	Zoom	0 (Wide) to 40 (Tele)
	Image Shift	-
	Control Panel Lock	Full Lock, Partial Lock, and Off
	Pointer Shape	Pointer 1, Pointer 2, Pointer 3
	Power Consumption	Normal and ECO
	Volume	0 to 20
	Mic Input Level	0 to 5
	Remote Receiver	Front/Rear, Front, Rear and Off
	User Button	Power Consumption, Info, Progressive, Test Pattern, Resolution, Mic Input Level, Pattern Display, Auto Calibration
	Pattern	Pattern Display, Pattern Type, User Pattern, and Test Pattern
Extended menu ☛ p.103	Display	Messages, Display Background, Startup Screen, and A/V Mute
	User's Logo	-
	Projection	Front, Front/Upside Down, Rear, Rear/Upside Down
	Operation	Direct Power On, Sleep Mode, Sleep Mode Timer, High Altitude Mode, and Audio Input

Top Menu Name	Submenu Name	Items or Setting Values
	Standby Setup	Standby Mode, Standby Microphone, Standby Audio
	USB Type B	Easy Interactive Function, USB Display/Easy Interactive Function, Wireless Mouse/USB Display
	Easy Interactive Function	Auto Calibration, Manual Calibration, Use Source, Number of Pen Users, Pen Operation Mode, Enable Right Click, Advanced
	Language	15 or 35 languages*
Info menu ☛ p.114	Lamp Hours	-
	Source	-
	Input Signal	-
	Resolution	-
	Video Signal	-
	Refresh Rate	-
	Sync Info	-
	Status	-
	Serial Number	-
	Event ID	-
Reset menu ☛ p.115	Reset All	-
	Reset Lamp Hours	-

* The number of supported languages differs depending on the region where the projector is used.

Network menu

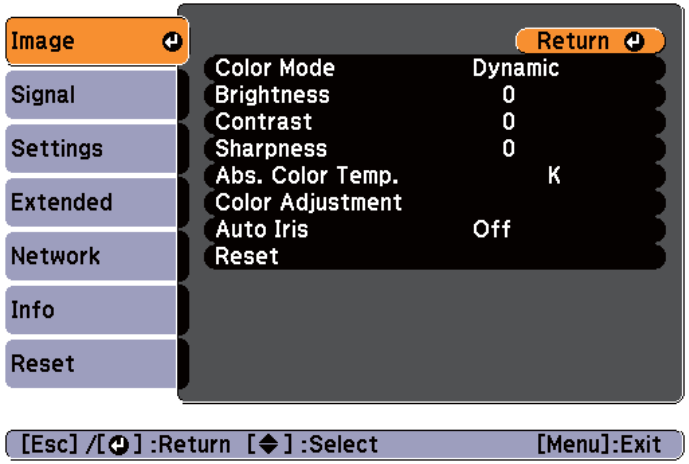
Top Menu Name	Submenu Name	Items or Setting Values
Basic menu ☛ p.107	Projector Name	-
	PJLink Password	-
	Web Control Password	-
	Projector Keyword	On and Off
Wireless LAN menu ☛ p.108	Wireless LAN Power	On and Off
	Connection Mode	Quick and Advanced
	Channel	1ch, 6ch, and 11ch
	Wireless LAN Sys.	802.11b/g and 802.11b/g/n
	SSID Auto Setting	On and Off
	SSID	-
	IP Settings	DHCP, IP Address, Subnet Mask, and Gateway Address
	SSID Display	On and Off
	IP Address Display	On and Off
Security menu ☛ p.109	Security	No, WEP, WPA-PSK, and WPA2-PSK
	WEP Encryption	128Bit and 64Bit
	Format	ASCII and HEX
	Key ID	1, 2, 3, 4
	Encryption Key 1, Encryption Key 2, Encryption Key 3, and Encryption Key 4	-
	Authentication Type	Open and Shared
	PSK	-
Wired LAN menu ☛ p.111	IP Settings	DHCP, IP Address, Subnet Mask, and Gateway Address

Top Menu Name	Submenu Name	Items or Setting Values
	IP Address Display	On and Off
Mail menu ☛ p.111	Mail Notification	On and Off
	SMTP Server	-
	Port Number	-
	Address 1 Setting, Address 2 Setting, and Address 3 Setting	-
Others menu ☛ p.113	SNMP	On and Off
	Trap IP Address 1 and Trap IP Address 2	-
	Priority Gateway	Wired LAN and Wireless LAN
	AMX Device Discovery	On and Off
	Crestron RoomView	On and Off
	Bonjour	On and Off

Image Menu

Settable items vary depending on the image signal and source currently being projected. Setting details are saved for each image signal.

☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40



Sub-menu	Function
Color Mode	You can select the quality of the image to suit your surroundings. ☛ "Selecting the Projection Quality (Selecting Color Mode)" p.51
Brightness	You can adjust the image brightness.
Contrast	You can adjust the difference between light and dark in the images.
Color Saturation	(Adjustment is only possible when component video, composite video, or S-video images are being input.) You can adjust the color saturation for the images.
Tint	(Adjustment is possible when component video signals are being input. Composite video and S-video input signals can only be adjusted when they are NTSC video signals.) You can adjust the image tint.
Sharpness	You can adjust the image sharpness.

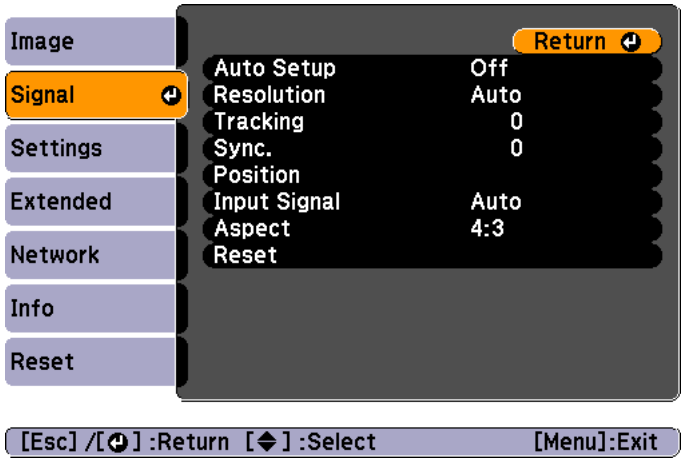
Sub-menu	Function
Abs. Color Temp.	(This item cannot be selected if **Color Mode** is set to sRGB.) You can adjust the overall tint of the image. You can adjust tints in 10 stages from 5000 K to 10000 K. The image is tinted blue when a high value is selected and tinted red when a low value is selected.
Color Adjustment	(This item cannot be selected if **Color Mode** is set to sRGB.) You can adjust the color strength for **Red, Green**, and **Blue** individually.
Auto Iris	(This item can be set only if **Color Mode** is set to **Dynamic** or **Theatre**.) Set to **On** to adjust the iris to obtain the optimum light for images being projected. The setting is stored for each Color Mode. ☛ "Setting Auto Iris" p.52
Reset	You can reset all adjustment values for the **Image** menu to their default settings. See the following to return all menu items to their default settings. ☛ "Reset Menu" p.115

Signal Menu

Settable items vary depending on the image signal and source currently being projected. Setting details are saved for each image signal.

You cannot make settings on the Signal menu when the source is USB Display, USB, or LAN.

☛ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.40



Sub-menu	Function
Auto Setup	(Only available when analog RGB computer signals are being input.) Set to **On** to automatically adjust Tracking, Sync., and Position to the optimum state when the input signal changes.

Sub-menu	Function
Resolution	(Only available when analog RGB computer signals are being input.) Set to **Auto** to automatically identify the resolution of the input signal. If images are not projected correctly when set to **Auto**, for example if some of the image is missing, adjust to **Wide** for wide screens, or set to **Normal** for 4:3 or 5:4 screens depending on the connected computer.
Tracking	(Only available when analog RGB computer signals are being input.) You can adjust computer images when vertical stripes appear in the images.
Sync.	(Only available when analog RGB computer signals are being input.) You can adjust computer images when flickering, fuzziness, or interference appear in the images.
Position	(This item cannot be set when the source is HDMI.) You can adjust the display position up, down, left, and right when a part of the image is missing so that all of the image is projected.
Progressive	(This setting can only be adjusted when composite video or s-video signals are being input. When component video or RGB video signals are being input, this setting can only be adjusted if the signals being input are interlaced signals (480i/576i/1080i).) Interlace (i) signal is converted to Progressive (p). (IP conversion) **Off**: Ideal for images with a large amount of movement. **Video**: Ideal for general video images. **Film/Auto**: This is ideal for movie films, computer graphics, and animation.

Sub-menu	Function
Noise Reduction	(This cannot be set when a digital RGB signal is input, or when an interlace signal is being displayed when **Progressive** is set to **Off**.) Smoothes out rough images. There are two modes. Select your favorite setting. It is recommended that this is set to **Off** when viewing image sources in which noise is very low, such as for DVDs.
HDMI Video Range	When the projector's HDMI port is connected to a DVD player, the projector's video range is set according to the DVD player's video range setting.
Input Signal	You can select the input signal from the Computer1 port or the Computer2 port. If set to **Auto**, the input signal is set automatically according to the connected equipment. If colors do not appear correctly when set to **Auto**, select the appropriate signal according to the connected equipment.
Video Signal	You can select the input signal from the S-Video port or the Video port. If set to **Auto**, video signals are recognized automatically. If interference appears in the image or a problem occurs such as no image is being projected when set to **Auto**, select the appropriate signal according to the connected equipment.
Aspect	You can set the aspect ratio for projected images. ☛ "Changing the Aspect Ratio of the Projected Image" p.52
Overscan	(This setting can only be adjusted when component video or RGB video signals are being input.) Changes the output image ratio (the range of the projected image). You can set the cropping range to **Off**, **4%**, or **8%**. When the source is HDMI, **Auto** is available. When **Auto** is selected, it automatically changes to **Off** or **8%** according to the input signal.